



National Grain and Feed Association

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Effects of a Changed Marketplace

-- On Elevators, Producers --

Over the years, participants in agricultural futures markets have come to expect a certain level of predictability. Producers and elevators alike have relied on cash/futures convergence as an absolute, bedrock principle underpinning markets. Likewise, elevators and producers have come to rely on basis levels – the difference between futures prices on-exchange and cash prices at a given location – behaving in fairly predictable patterns. Elevators have relied on these patterns to help producers market crops and manage risk by offering forward cash contracts.

Today, the situation has changed. Agricultural futures markets no longer are performing their risk management and price discovery roles in a consistently effective way. Many industry participants believe that convergence does not occur consistently. As a result, exchange-traded futures have become a less effective hedging mechanism for commercial grain hedgers, who in turn feel less able to manage the risk they historically have assumed on behalf of their farmer-customers. To compound this effect, today's relatively higher prices and market volatility have resulted in financial stresses for commercial grain hedgers as borrowing needs for working capital and margining have escalated to several times normal levels.

Basis – Why It's Not Behaving as "Normal"

Many factors contribute to basis, the difference between on-exchange futures price levels and cash bids at any given location. Some of these factors include:

- Transportation costs/logistical problems
- Change in supply/demand fundamentals
- Large carry-over inventories
- Farmer selling
- Storage rates
- Investment capital

A change in any of these factors can result in significant changes to basis levels. However, many changes are occurring simultaneously in today's market environment. The commodity supply situation is relatively tight, with major crops competing for acreage. Demand is growing at a healthy rate, reflecting increased consumption worldwide, along with growth in biofuels production. Fuel and transportation costs have

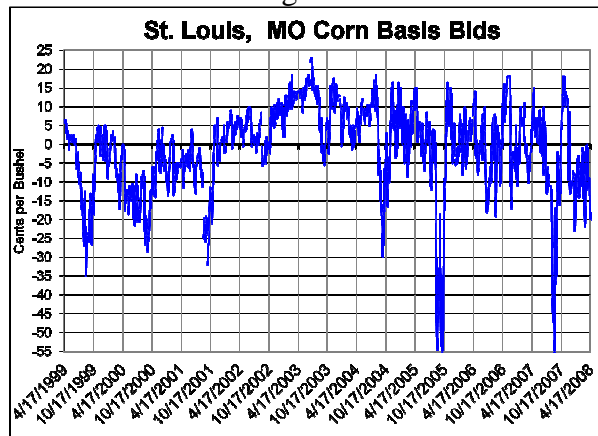
increased markedly. Importantly, the large influx of investment capital into agricultural futures markets over the past couple years is a new and significant factor.

Over time, certain basis patterns came to be recognized and expected. Grain elevators have relied on these patterns in marketing grain on behalf of their producer-customers. Farmers recognized the same patterns and desired to participate in strengthening basis levels. In response to this producer demand, elevators developed cash forward contracts like Hedge to Arrives (HTAs) that allow producers to set the contract basis at some point prior to delivery. In times when basis behaves in predictable ways, the arrangement works well for elevators and producers.

However, historical basis patterns have not held true recently. Shifts in the factors listed above that affect basis have resulted in wider basis swings and greater volatility.

As an example, a basis chart for St. Louis corn is shown in Figure 1. Up until about three years ago, basis fluctuated in a fairly predictable pattern and range – between about 30 under and 20 over Chicago futures prices. However, starting in 2005, basis has become much more volatile and slightly “weaker” than demonstrated historically.

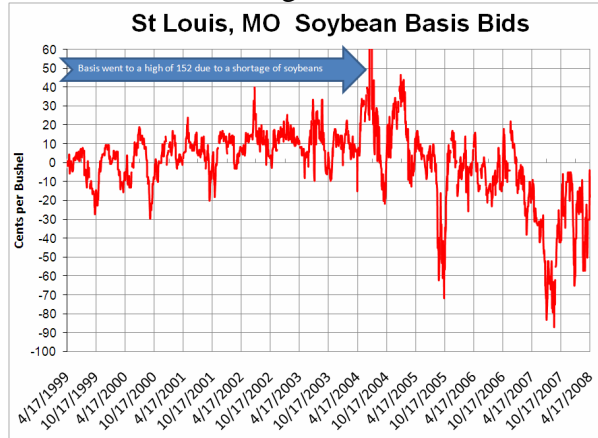
Figure 1



Source: Advance Trading Inc.

In a similar fashion, soybean basis also has been affected. Basis levels for St. Louis soybeans, shown in Figure 2, are much more volatile and about 50 cents below historically expected patterns, prior to about three years ago.

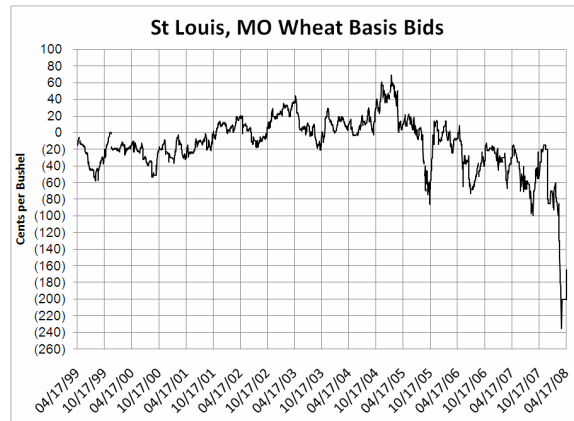
Figure 2



Source: Advance Trading Inc.

The changed marketplace is perhaps most evident in wheat markets. Figure 3 shows St. Louis wheat basis, which shows much greater volatility and basis levels about 40-50 cents below averages of the previous several years. While a number of factors, such as those mentioned above, impact basis levels, many believe that large volumes of investment capital entering agricultural futures have artificially inflated futures prices and served as a primary contributor to “weaker” basis.

Figure 3



Source: Advance Trading Inc.

*This chart represents river values in the St. Louis area; wheat mills in the St. Louis area are paying higher values (e.g., +5 Chicago on one recent day) for appropriate-quality wheat.

In this new environment, cash prices at times might appear at times to be “too cheap” relative to futures. Reality is that futures levels have risen due to a number of factors, including new investment capital entering the marketplace. Meanwhile, cash bids at local locations still reflect the true cash value of grains and oilseeds at that time and location. However, in this more volatile environment, elevators and producers alike have found it much more difficult to adequately manage price risk.

Cash Forward Contracting

Volatile and unpredictable basis behavior has been just one source of consternation to producers and their elevators. When producers forward contract with their elevator, the elevator assists the producer by taking on price risk through hedging. While some producers may maintain their own hedge accounts, it is more typical that a country elevator purchases grain from producers and hedges using exchange-traded futures.

In the current environment of relatively higher prices, elevators have found it much more expensive to manage their hedges. When cash grain is forward contracted at a certain price, the elevator sells futures contracts on-exchange. If price levels advance to higher levels, as recently, the elevator is required to deposit margin funds with the exchange clearing corporation. This is a normal and historical risk management function assumed by the elevator following deferred cash grain purchases from producers.

However, recent commodity price increases have led to unprecedented borrowing by elevators – and unprecedented lending by their bankers – to finance inventory and maintain hedge margins. Here is an example of the heightened harvest borrowing needs of a typical country elevator today, and their financial impacts.

Figure 4

	A 2006			B 2008 (Projected) Big Crops			C 2008 (Projected) Small Crops		
	Bushels purchased	Price		Bushels purchased	Price		Bushels purchased	Price	
Corn	1,000,000	\$2.30	\$2,300,000	1,230,000	\$4.00	\$4,920,000	1,100,000	\$7.00	\$7,700,000
Soybeans	400,000	\$5.50	\$2,200,000	428,000	\$9.50	\$4,066,000	375,000	\$15.00	\$5,625,000
Wheat	150,000	\$3.50	\$525,000	180,000	\$8.50	\$1,530,000	170,000	\$10.00	\$1,700,000
Cost - Inventory			\$5,025,000			\$10,516,000			\$15,025,000
Harvest Inventory Cost Increase						209.3%			299.0%

Source: Grain Service Corporation

This simulation is derived from an aggregate of the customer base of an NGFA-member firm that provides futures and option brokerage services to the agricultural industry, along with offering hedging education and merchandising risk-management services. It arrives at an “average” case that is illustrative of conditions faced by a “typical” commercial grain hedger today.

Note that harvest inventory purchases in 2006 totaled just over \$5 million. However, projections in 2008 range from 200% – 300% of what might be considered “normal”

levels two years ago due to higher prices. Interest alone on \$10 million of borrowing to purchase inventory amounts to \$175,000 over three months. Over the course of a full year, that amounts to 85 cents per bushel with soybeans at \$12!

To help better understand the financial stresses a “typical” elevator might face when hedging forward purchases, a separate but related exercise looked at a selected group of elevators for whom the actual weighted average per bushel “loss” on open 2008-crop, 2009-crop and 2010-crop hedges were \$1.46 for corn, \$4.47 for soybeans and \$3.51 for wheat, for a total weighted average hedging loss of \$2.49 per bushel (see Figure 5). Applying those averages to several real-world elevators who buy grain from producers and hedge on-exchange shows that a “typical” country elevator’s hedges could be “under water” in amounts ranging from just less than \$1 million to almost \$8 million, as a consequence of forward contracting with its producer-customers. (Note: these figures are not specific to any one elevator; they are illustrative in nature but believed to be indicative of actual hedging results.)

Figure 5

Hedge Losses – '08, '09 and '10 Crops				
(Weighted average prices as of 2/29/08)				
	<u>Elev. 1</u>	<u>Elev. 2</u>	<u>Elev. 3</u>	<u>Elev. 4</u>
Corn	876,000	751,900	4,015,000	408,800
Soybeans	1,005,750	581,100	3,799,500	469,350
Wheat	596,700			
Hedging Loss	<u>\$2,478,450</u>	<u>\$1,333,000</u>	<u>\$7,814,500</u>	<u>\$878,150</u>

1: Eastern corn belt, single-station elevator hedging 600,000 bushels corn, 225,000 bushels soybeans and 170,000 bushels soft red wheat
2: Eastern corn belt, single-station elevator hedging 515,000 bushels corn and 130,000 bushels soybeans
3: Northern corn belt, multi-station firm hedging 2.75 million bushels corn and 850,000 bushels soybeans
4: Western corn belt, single-station elevator hedging 280,000 bushels corn and 105,000 bushels soybeans

Source: Grain Service Corporation

Over the course of a year, interest costs on the “typical” elevator’s ’08 forward hedges would be 10.2 cents/bushel for corn; 31.2 cents/bushel for soybeans; and 24.6 cents/bushel for wheat if current prices flatten out. Looking ahead to the elevator’s ’09 forward hedges, interest cost over 18 months are 15.3 cents/bushel for corn; 46.8 cents/bushel for soybeans; and 36.9 cents for wheat. (See Figure 6.)

Figure 6

Interest Costs -- '08¹ and '09² Forward Hedges		
2008	Corn	10.2 cents/bu.
	Soybeans	31.2 cents/bu.
	Wheat	24.6 cents/bu.
2009	Corn	15.3 cents/bu.
	Soybeans	46.8 cents/bu.
	Wheat	36.9 cents/bu.

1: For 12 months at 7% if prices flatten out
2: For 18 months at 7% if prices flatten out

Source: Grain Service Corporation

Total up borrowing to purchase inventory; borrowing to finance hedging; and interest costs, and it's not hard to see that a hedger's borrowing is substantial and this year, with higher prices, is likely to be several multiples of "normal" levels. Many elevators have run up against their borrowing limits, and lenders have reached their limits. Somehow the elevator has to recover these costs – or if that is not possible, forward purchases and hedging activity may be limited.

In today's environment, some elevators are unable to finance additional deferred grain purchases. In some cases, lenders have told their customers that existing hedges will continue to be financed, but they can advance no additional funds for hedging additional deferred purchases. This has had the unfortunate impact of compelling some elevators to suspend offering certain forward cash contracts simply because they cannot access the capital to hedge their commodity purchases. In other cases, elevators may continue to offer bids for deferred purchases, but with wider margins and/or higher fees to help account for their higher levels of risk.

Potential Solutions

The NGFA believes that one key factor driving futures artificially higher and degrading the relationship between cash and futures is the influx of investment capital into agricultural futures markets. This growing demand by investment capital to own agricultural futures contracts has the dual impact of forcing futures prices to artificially higher levels – resulting in cash/futures "divergence" rather than convergence – and driving up the margining and financing costs of commercial grain hedgers. Ripple effects are felt as costs increase throughout the grain marketing system and producers may see marketing alternatives limited.

The NGFA believes that agricultural futures markets need to "take a break" from new infusions of investment capital. For that reason, the NGFA is calling for a moratorium on

hedge exemptions for long-only, passively-managed investment capital. In addition, the NGFA believes that the Commodity Futures Trading Commission needs to re-examine its Commitments of Traders report to ensure that all investment capital is reported accurately. The NGFA also is calling for a new survey by CME Group to determine whether storage rates (premium charges) for CBOT grains and oilseed contracts – which we believe are too low and don't reflect the true value of storage – should be increased to help enhance convergence.

Ultimately, time may bring more balance back to the marketplace. However, in the meantime, action is needed to re-establish the price discovery and risk management functions of agricultural futures markets. This could be accomplished through action by futures exchanges or through intervention by regulators, or some combination of both. The NGFA will continue to work with futures exchanges and regulators to re-establish the risk management and price discovery functions of U.S. futures markets to best serve the common interests of commercial grain hedgers and their producer-customers.