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Agriculture and the 2008 Credit Crisis

The Current Credit Situation and Coming Cost-Price Squeeze

Mark Welch, John Robinson, Steve Amosson, Larry Falconer, Stan Bevers and David Anderson*

U.S. farmers have seen record high prices for many of their commodities in the last few years. Wheat prices have been as high as $13 per bushel, corn near $8 per bushel, soybeans more than $16 per bushel, and cotton more than $1 per pound. While farm input expenses have increased as well, they have not increased at nearly the rate of commodity prices. This has produced record farm income in recent years. That situation appears to be changing for 2009. Farmers are headed for a cost-price squeeze that will reduce profits this year, at the same time the credit crisis on Wall Street is making borrowing more difficult for all credit customers.

A cost-price squeeze is a situation in which the ratio of prices received to prices paid is declining (Tweeten, 1980). Just the opposite has been true the last few years. For example, variable costs for dry land wheat production in the Texas panhandle have increased 75 percent since 2005, from about $50 per acre to $84 per acre (see Table 1 and Fig. 1). During this period, the farm level wheat price at harvest has increased 166 percent, from $3.14 per bushel to $8.35 per bushel.

USDA projects that variable costs for wheat will increase by about 30 percent in 2009 (USDA, 2008). Meanwhile, the price on the Kansas City Board of Trade for July 2009 wheat (the price-based contract for wheat grown in the Texas panhandle) has fallen to $6.82 per bushel at the time of this writing. Accounting for local basis (-$0.80/bu), this projects a local cash price of $6.02 per bushel for wheat in the Texas panhandle in July 2009. Wheat production from 2006 to 2008 showed a profit above variable costs from $25 to $66 per acre. With the cost-price squeeze in 2009, grain revenue will just cover variable costs. This means that very little income will be available to pay overhead costs such as machinery, debt and/or family living expenses.

Producers of hard red spring wheat in South Texas are seeing variable costs of $202 per acre for the 2009 crop, compared to $137 per acre in 2008. In 2008, the July Kansas City wheat contract expired at $8.45 per bushel. The current quote for 2009 is $1.63 cents lower, a 19 percent price decrease in price to go along with a 47 percent increase in variable costs.

*Assistant Professor and Extension Economist–Grain Marketing and Policy, Associate Professor and Extension Economist–Cotton Marketing, Professor and Extension Economist, Professor and Extension Economist–Management, Professor and Extension Economist–Management, and Professor and Extension Economist–Livestock Marketing, Texas AgriLife Extension Service, The Texas A&M System.

Table 1. Northern Texas panhandle dry land wheat budgets

	2003	2004	2005	2006	2007	2008	2009F
Variable costs ($/acre)	$45.41	$45.57	$47.94	$52.72	$73.75	$83.83	$108.33
Yield (bu/acre)	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Harvest price ($/bushel)	$2.81	$3.33	$3.14	$.492	$5.52	$8.35	$6.02
Grain revenue ($/acre)	$50.58	$59.94	$56.52	$88.56	$99.36	$150.30	$108.36
Returns above variable costs ($/acre)	$51.7	$14.37	$8.58	$35.84	$25.61	$66.47	$0.03

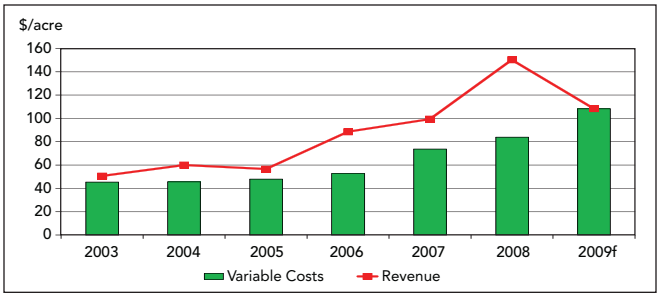

Figure 1. Dry land wheat variable costs and grain revenue.

Budgets for 2003 – 2008 shown in Table 1 and Figure 1 are from the Texas AgriLife Extension Service. The budget for 2009 is based on USDA's projected input price increases for fall 2009 planting of wheat.

Wheat might have a relatively better position than alternative crops. Cotton, for example, has been experiencing a cost-price squeeze since 2003. Cotton prices have not risen as grain prices have. The cost of pumping water to irrigate West Texas cotton increased dramatically when energy prices rose sharply after 2005. At that time, USDA estimated that returns above variable costs nationwide dropped 80 percent. In 2007 there was an increase in the spread between gross returns and variable costs, mostly because of record yields and quality. Yields, quality and gross returns for U.S. cotton in 2008 will probably average much less, while fertilizer and energy-related costs have been higher. This is the reason for the recent large shift away from cotton, particularly in the Delta and Southeast.

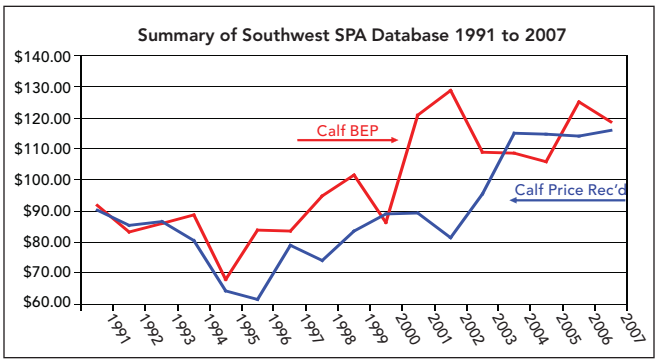

Figure 2. Calf break-even prices versus calf price received.

Cow-calf producers have experienced a similar situation. While calf prices have been high over the past 5 years, the cost of production (break-even price) has risen significantly. Calf prices have now fallen. Figure 2 presents data from the Southwest SPA database of ranch herds.

The cost-price squeeze is not new in the livestock feeding industry. High crop prices represent high feed costs to all livestock feeders. Producers have faced this squeeze since corn prices began increasing in late 2006 (see Figs. 3 and 4). Costs rose sharply for all segments producing meat and milk, primarily because of feed costs. High corn prices led to record high soybean and soybean meal prices. The chain reaction for protein feed prices pulled all feed sources higher, including whole cotton seed and cottonseed meal. The competition for acres drove hay prices higher as well.

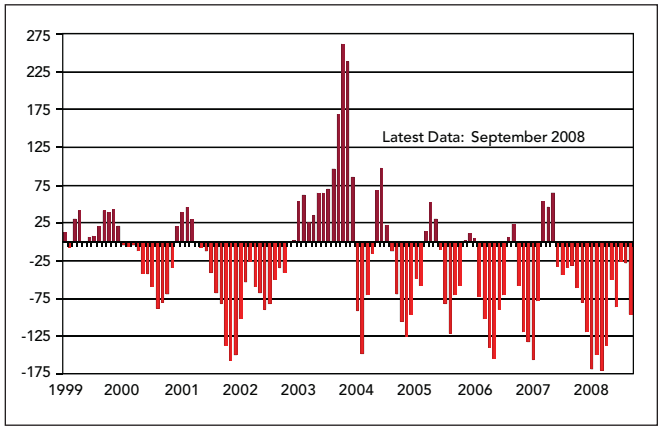

Figure 3. Average returns to cattle feeders feeding 725-pound steers, S. Plains, monthly.

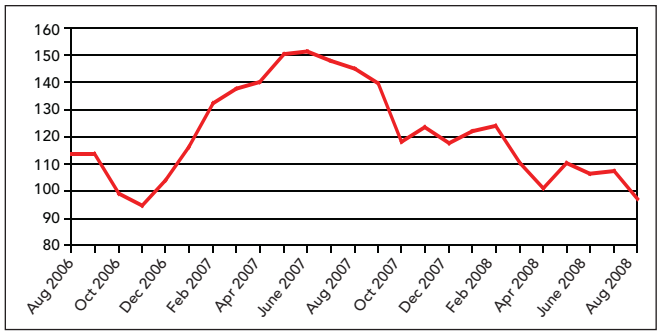

Figure 4. Broiler price minus feed cost index, 1998-2000=100.

Fuel and fertilizer affect livestock also. Increased transportation costs have pushed calf prices lower. Many pastures, especially east of Interstate 35, are improved forage varieties that require fertilizer. The high cost of fertilizer results in less being applied, which reduces forage production and carrying capacity. What should be a good year for cattle on wheat pasture, based on calf weight-price spreads, is weakening because of higher wheat production costs.

Price-to-cost ratios help measure how the squeeze is affecting producers. This information can be calculated as a ratio, as is the milk-feed price ratio, or by subtracting feed costs from price or returns (see Fig. 5). In either case, the smaller the number, the greater the indication of a cost-price squeeze.

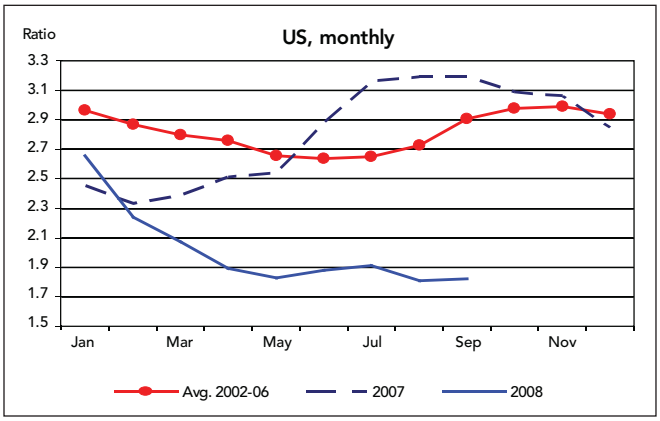

Figure 5. Milk-feed price ratio.

As they prepare loan documents for the 2009 crop year, farmers will face increased production costs and lower profit margins. Getting adequate financing under such conditions is always challenging, but it will be aggravated by the financial turmoil on Wall Street. Banks are likely to tighten credit standards and raise interest costs. According to Texas A&M University's Agricultural and Food Policy Center, banks may be forced to raise capital requirements and loan loss reserves, which means that less money will be available to loan. So producers face not only lower net revenue projections, but also increased lending standards and higher borrowing costs. While the best customers with good credit and an adequate asset base will still get loans, credit may be harder to get for those with weak credit and less collateral.

Budgeting for 2009 will present many challenges. Producers must first carefully analyze inputs as to cost and efficiency so they can achieve the greatest productivity for the least cost. The benefits of crop rotations, variety selection, tillage systems, soil and plant testing, and precision application should all be considered in an effort to reduce the cost of production and maintain profits. Input prices may come down with falling commodity prices, but they usually fall at a slower rate.

Producers will need to prepare their loan documents very carefully. Candid, open communication with the lender will increase the likelihood of obtaining credit and having a loan application processed quickly. Loan documents should include a realistic assessment of the profitability of an operation in the current period of economic volatility, as well as an appraisal of long-term financial viability.

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