

# Agriculture and The Credit Crisis

Publication Series  
Department of Agricultural Economics  
Texas A&M University System

2008-1

## The Current Credit Situation and Coming Cost-Price Squeeze

Mark Welch, John Robinson, Steve Amosson, Larry Falconer, Stan Bevers, and David Anderson<sup>1</sup>

U.S. farmers have seen record high prices for many of their commodities the last few years. Wheat prices have gone as high as \$13 per bushel, corn near \$8 per bushel, soybeans over \$16 per bushel, and cotton spiked to over \$1 per pound. While farm input expenses have increased along with rising output prices, the rate of increase in output prices has exceeded that of input costs the last few years leading to record farm income. That situation appears to be changing for 2009. Farmers are headed for a cost-price squeeze that will reduce profits in the coming year. This will happen at a time when 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 by farmers is declining (Tweeten, 1980). Just the opposite has been true the last few years. Using for example dry land wheat production in the Texas

panhandle, variable costs since 2005 have increased 75%, from about \$50 per acre to \$84 per acre (see Table 1 and Figure 1)<sup>2</sup>. During this period, the farm level wheat price at harvest has increased at more than twice that rate, up 166%, from \$3.14 per bushel to \$8.35 per bushel. This increasing ratio of prices received to prices paid by farmers has been favorable for net farm income.

Budgets projections based on USDA cost estimates for 2009 indicate that variable costs for wheat will continue to

increase by about 30% (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 for wheat in the Texas panhandle next July of \$6.02 per bushel. Wheat production from 2006 to 2008 showed a profit above variable costs from \$25 to \$66 per acre. The cost-price squeeze in 2009 results in grain revenue just covering variable costs. Producers should be aware that very little income above variable costs will be available to pay overhead costs such as

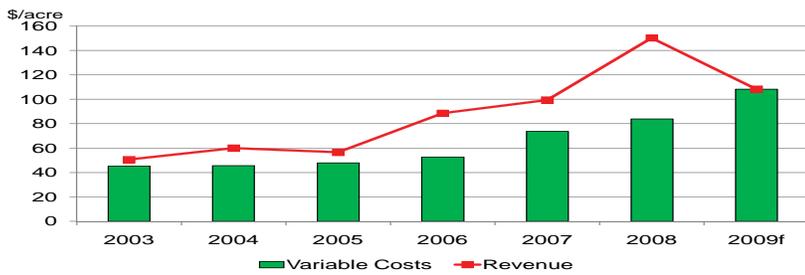
**Table 1. Northern Texas Panhandle Dry Land Wheat Budgets**

|  | 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  | \$4.92  | \$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) | \$5.17  | \$14.37 | \$8.58  | \$35.84 | \$25.61 | \$66.47  | \$0.03   |

<sup>1</sup> The authors are all economists with Texas AgriLife Extension Service, part of the Texas A&M University System.

<sup>2</sup> Budgets for 2003 to 2008 from Texas AgriLife Extension Service. Budget for 2009 based on USDA projected input price increases for fall planting of 2009 wheat.

Figure 1. Dry Land Wheat Variable Costs and Grain Revenue



machinery, debt and/or family living expenses.

Hard red spring wheat producers 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% price decrease in price to go along with a 47% increase in variable costs.

Wheat might be relatively better off among alternative Texas crops. In contrast, cotton has experienced a longer term cost-price squeeze since 2003. Cotton prices have not enjoyed the same relative rise in prices as the grain crops, and more recently has

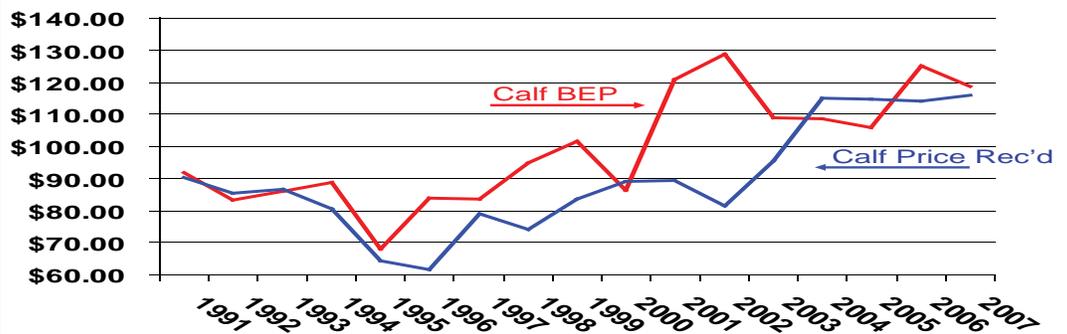
suffered a severe downward correction. West Texas irrigated growers have recent experience with increased costs of pumping water when energy prices rose sharply after 2005. At that time, USDA estimated returns above variable

quality, and gross returns for U.S. cotton in 2008 will probably average much lower, while fertilizer and energy related costs have been higher. This has been the reason for a large recent shift away from cotton, particularly in the Delta and Southeast.

Cow-calf producers have not been immune from this situation. While calf prices have been high over the past five years, the cost of production (breakeven price) has risen significantly during this same time. Now, with the recent

Figure 2. Calf Breakeven Prices versus Calf Price Received

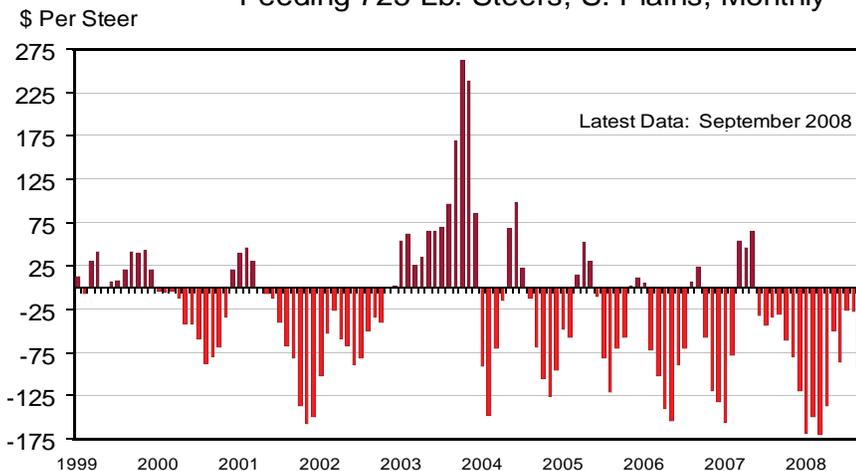
Summary of Southwest SPA Database 1991 to 2007



costs nationwide dropped 80%. 2007 saw an increase in the spread between gross returns and variable costs, mostly due to record yields and quality. Yields,

financial situation, calf prices have fallen. Figure 2 presents data from the Southwest SPA database of ranch herds that have been analyzed.

Figure 3. Average Returns to Cattle Feeders Feeding 725 Lb. Steers, S. Plains, Monthly



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 Figures 3 and 4). Costs rose sharply for all segments producing meat and milk. These costs changes were primarily due to feed; the largest cost category. 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 pulled hay prices higher as well.

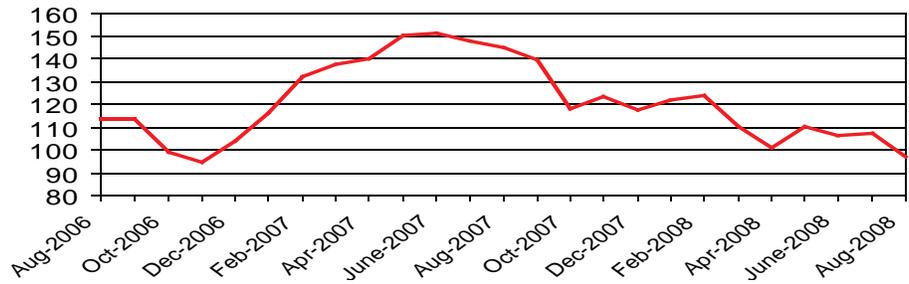
Fuel and fertilizer affect livestock also. Increased transportation costs have pressured calf prices lower. Many pastures, especially east of Interstate 35 are improved forage varieties requiring fertilizer. Higher fertilizer prices result in less being applied, reduced forage production, and reduced carrying capacity. What should be a good wheat pasture cattle year based on calf weight price spreads, is weakening due to higher wheat production costs. Price to cost ratios provide a measure of the squeeze affecting producers. They may be calculated as a ratio, as is the milk-feed price ratio or as price or returns minus feed costs (see Figure 4). In either case, the smaller the number the higher costs are relative to output price or returns indicating the cost-price squeeze.

If they have not already, farmers will soon be preparing loan documents for the 2009 crop year in which they face increased production costs and lower profit margins. Getting adequate financing under such conditions is always challenging but will

be aggravated this fall by the financial turmoil on Wall Street. In response to the current financial situation, banks are likely to tighten credit standards

profits. Input prices may come down with falling commodity prices, but usually do so at a slower rate.

Figure 4. Broiler Price Minus Feed Cost Index, 1998-2000=100



and raise interest costs. Banks may be forced to raise capital requirements and loan loss reserves which means fewer funds available to loan (AFPC, 2008). Producers are going in to the 2009 growing season faced with lower net revenue projections, 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.

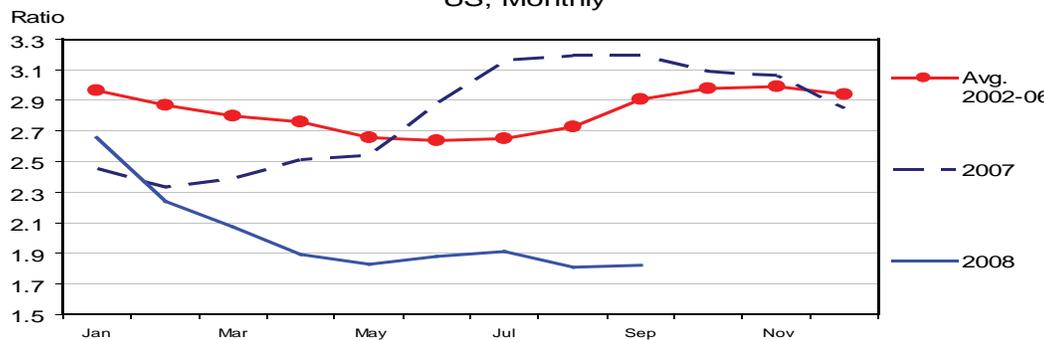
Budgeting for 2009 will present many challenges. Producers must first carefully analyze inputs as to cost and efficiency in an effort to achieve the greatest productivity for the least cost. The benefits of crop rotations, variety selection, tillage systems, soil and plant testing, and precision application should all be considered in an effort to reduce the cost of production and maintain

Careful preparation of loan documents accounting for the financial challenges discussed above is both necessary and beneficial. Candid, open communication with your lender will increase the likelihood of successfully obtaining credit as well as the speed with which your loan application is processed. It will provide a realistic assessment of the profitability of your operation in the current period of economic volatility but should also provide an appraisal of long term financial viability.

**References**

Agricultural Food and Policy Center (AFPC), Texas A&M University. "The Credit Crisis—Are You Prepared?" AFPC Bottom Line, October 2008, p.1. Available at [http://Afpc.tamu.edu/newsletters/docs/2008\\_October\\_Afpc\\_Bottom\\_Line.pdf](http://Afpc.tamu.edu/newsletters/docs/2008_October_Afpc_Bottom_Line.pdf).  
 Tweeten, Luther G. "An Economic Investigation Into Inflation Passthrough to the Farm Sector", Western Journal of Agricultural Economics, December (1980): 89-106.  
 U.S. Department of Agriculture, National Agricultural Statistics Service (NASS). "Prices Paid Indexes: Monthly and Annual Average, United States, 2003-2008". Available online at <http://www.nass.usda.gov>. Accessed October 6, 2008.

Figure 5. Milk-Feed Price Ratio US, Monthly



Visit Texas AgriLife Extension Service at <http://AgriLifeExtension.tamu.edu>.