

# The Agricultural Credit Situation

**11/12/2009**

by Danny Klinefelter, Professor and Extension Economist with Texas AgriLife Extension, Texas A&M University

Serious problems that developed in the agricultural credit situation in 2009 could escalate in 2010–2011.

The earliest problems have occurred for lenders with loan concentrations in beef, dairy, hogs and poultry. Producers in all the protein sectors have suffered significant losses for over a year, resulting in a large increase in non-performing loans. Although there were few foreclosures in 2009, without a significant turnaround in income, many dairy and hog loans are in a near crisis situation. Many producers have lost enough equity that their lenders will be forced to discontinue financing.

The impact on the agricultural sector will be magnified by the fact that many dairy and hog operations represent the majority of the assets for many producers. If the livestock operation fails, all of the assets of the business will have to be liquidated, including the land base. In addition, most of the more successful dairy operations are not in a position where their lender will allow them the leverage up to purchase the assets of the operations that are liquidating, even at a significant discount. While dairies tend to fail as individual businesses, many hog operations are contractually part of integrated supply chains. Some very well managed hog operations are going to be liquidated not just because of their own performance, but because their integrator fails and the entire supply chain goes down with him.

Crop producers have fared fairly well over the past several years, but many grain producers are likely to have carryover operating debt if they purchased inputs early in the year when inputs were high and then had a poor crop or forward priced their crop after prices declined. Fortunately, most grain producers experienced a run of several years of above-normal income and pushed cash forward into 2009 for tax reasons. Now, however, margins going forward appear to be returning to normal levels.

An increase in the federal biofuels standard would provide a temporary benefit to grain producers, but it would further exacerbate the financial problems of livestock producers.

Some borrowers will be able to restructure their loans using guarantees from USDA's Farm Service Agency (FSA), but even this lender of last resort will require that borrowers demonstrate the ability to service the loan. Also, many confinement livestock operations have credit needs that far exceed FSA's limits.

The reality is that there has been little involuntary exit from agriculture in the last 4 or 5 years. Unfortunately, extended boom periods tend to be followed by a cleansing period of

about 3 years and a hangover effect can extend beyond that. It has been my observation the half-life of the lessons learned from a financial crisis is about 10 years. A good example is the importance that lenders place on profitability analysis. After the farm financial crisis of the 1980s, the Office of the Comptroller of the Currency found that 70 percent of agricultural banks were evaluating borrowers' accrual adjusted net income in 1990. By 1995, the number had dropped to 50 percent as conditions improved, memories faded and competition heated up.

Remember that the function of a competitive market is to drive the economic return to the average producer to breakeven through supply and demand responses in both input and output markets. In equilibrium, the top-end producers are profitable and growing, the average are hanging in there, and the bottom end are losing money and being forced to exit the industry. Business success and survival depend on continuous improvement at a pace necessary to stay out of the back of the pack.

The same is true for lenders. During the boom periods, growth is strong, profits are increasing, loan losses are low and competition among lenders is intense. As farm income deteriorates, loan problems begin to mount and commercial lenders begin to pull in their horns as they start experiencing loan losses and their lending staff gets bogged down in dealing with adverse credit.

Fortunately, really serious industrywide problems occur only every 20 to 30 years. The last time was the farm financial crisis of the 1980s. Unfortunately, some signs point to a period of financial stress extending over several years. How severe the problems become will depend primarily on three factors:

- How soon net farm income rebounds
- What happens to land values
- How soon and how much interest rates increase

Although financial regulators and Congress are always more reactive than proactive, their actions significantly affect how lenders operate. The current administration is increasing the money supply and providing more liquidity in the financial markets, but commercial bank and Farm Credit System regulators are aggressively working to ensure that lenders recognize and mitigate risks. Also, the increase in bank failures and FDIC losses—in part because of higher limits on insured deposits—has prompted the FDIC to recommend that banks prepay their FDIC premiums for the next 3 years to rebuild the insurance fund.

To mitigate risk, bank regulatory agencies are considering raising minimum capital standards. The Farm Credit Administration is also focusing on minimum capitalization and profitability levels for the Farm Credit Associations. The result will be that regardless of the underlying cost of funds, risk premiums and interest rate spreads will have to increase for all commercial lenders.

A major regulatory change is that loan loss reserve requirements are now expected to be more forward looking and anticipatory and less dependent on recent history. Only a few years ago, regulators and accounting firms were criticizing lenders for excess loss reserves that were built to absorb the longer term cyclical downturns. Some lenders that were required to roll out what were deemed “excess” reserves are now being criticized for either not being adequately reserved or needing higher capital levels to absorb shock events.

The current climate has affected lender behavior. First, all lenders have less appetite for risk. This is being manifested in several ways:

- Lenders are requiring more and better documentation of the information provided by borrowers, as well as closer monitoring of performance after loans are made.
- There are fewer exceptions to underwriting standards.
- Emphasis has increased on repayment capacity, including more analysis of accrual adjusted net income rather than just cash basis tax returns. The Farm Financial Standards Council has recognized for nearly two decades that cash basis accounting can lag true profitability by 2 years or more in terms of both upturns and downturns.
- Working capital and liquidity are also more important. Cash may be king, but a business can be making payments and going broke by refinancing, selling assets, building accounts payable and deferring the replacement of capital assets. So staying current on payments may not be enough by itself to keep borrowers’ loans out of trouble.
- Repricing terms are shorter—a loan may be amortized over 15 or 20 years but repriced every 5 years. This practice is driven largely by the lender’s ability to match fund the maturity of the loan or to sell the loan in the secondary market.
- Higher risk premiums are being built into interest rates. In part, this reflects that inadequate premiums had previously been priced into higher risk loans, often because of competition.
- Advance rates are lower, such as requirements for higher down payment or equity.
- More emphasis is being placed on borrowers’ risk management practices.
- Borrowers with larger credit needs are having more difficulty getting loans larger than their primary lender’s hold positions or legal lending limit, as potential participants are experiencing their own problems and demanding better documentation and quality.
- The use of FSA guarantees has increased significantly. Nationally, operating loan guarantee volume was up over 30 percent and mortgage guarantees up 9 percent. FSA actually ran out of funding for the operating loan guarantees in 2009. The funding for both programs has been increased by 20 percent for 2010, but the carryover from 2009 is going to have to come out of that as well. Borrowers who will require FSA assistance must start early. FSA’s staff will be swamped, and if demand increases as expected the funding could run out before the year is over.

These changes reinforce the importance of several factors. First, interest rates and debt structure can be as important as debt levels in terms of the impact of debt on producer's financial performance, and rates are subject to changing much more rapidly. One of the current concerns in financial markets is the potential for increases in interest rates and inflation as a result of the increased federal debt and creation of new entitlement programs. Interest rates are about as low as they can get, so the only way to go is up. If the economy rebounds and the private sector reenters the capital debt markets, there is a potential for a crowding-out effect. The federal debt will be issued and refinanced, but the rates are determined by the level of competition in the market. Recently, the federal government has had little competition. Since nearly 40 percent of the federal debt is held by foreign investors, the problem could be exacerbated if inflation occurs and the dollar is devalued, which would make U.S. Treasuries less attractive to those investors except at much higher rates. The Federal Reserve could end up between the proverbial rock and a hard place, needing to raise interest rates to curb inflation, but at the same time not wanting to stall economic growth. While interest rates are likely to increase, they probably will not go up significantly in 2010. The current economic recovery doesn't have enough legs under it and I have not yet seen a new economic engine emerging.

Another increasingly important factor in the credit decision process is the borrower's proven management ability. Lenders recognize that management is the primary determinant of success or failure, but it is also extremely hard to quantify in risk rating models. Many studies have found that the top quarter of producers in terms of profitability tend to only be about 5 percent better than average, whether in terms of costs, production or marketing. But they do it over and over again. By way of analogy, remember that the future Hall of Fame baseball player with a .300 lifetime batting average gets only 1 more hit every 20 times at bat than the player who hits .250 and just manages to hang on.

Of the different management attributes, risk management ability will become more important in separating the winners from the losers as increased volatility gets priced into or pushed down the value chain. Among the most obvious examples are situations that have occurred are where grain elevators, merchandisers and fertilizer dealers either have changed their internal policies or are being limited by their own lenders in terms of the exposure they can take on futures contracts or inventories. If they can't manage the risk for their customer through forward contracts, hedging, or prepurchasing inventory without prepayment, the price risk gets shifted to the producer.

Another major issue for producers, lenders, suppliers and buyers of agricultural products is counter party risk. This is the risk of the other party to a contract failing to keep their end of the agreement. Bankruptcies by ethanol plants, processors, integrators, grain elevators, fertilizer dealers and others have left a number of producers with major losses and their lenders with new problem loans.

As for loan losses on a broad scale, the ultimate financial impact on the financial health of agricultural sector will be determined by and reflected in land values. The basic reason

is that 87 percent of total farm assets are in real estate. With the increase in land values in recent years the total debt:asset ratio for the agricultural sector is at historically low levels, but the number can be very deceiving. First, 70 percent of farm operations carry no debt. The use of credit is more concentrated among capital intensive and larger operations that depend primarily on farm income for debt repayment. Most of the shift away from debt over the last 10 years has occurred in farms and ranches generating less than \$500,000 annual gross sales. Add to this the fact that 42 percent of land in farms is owned by non-operator landlords and of the 58 percent owned by farm operators, 61.3 percent is owned by farmers with less than \$250,000 annual gross sales. Because both the net worth and the underlying collateral for many farm loans, even operating loans, is real estate and because the majority of farm debt and farm income is concentrated on commercial scale farms and ranches, the value of land is critical to the risk of loss in the event of default faced by agricultural lenders. The market value of land is determined at the margin—the prices of land sold. If farm income drops and debt servicing problems occur, forced sales will increase. If able buyers get nervous about reduced incomes prospects and believe land values could fall, they will sit on the sidelines. This would exacerbate the problem and land values would fall even further.

Changes in land values obviously aren't evenly distributed. Land type, quality and location differ significantly, and so will the market impacts. Declines in value have already been occurring in recreational and transitional land markets, and on marginal quality agricultural land. If values fall by less than 10 percent from their peak the impact will be minimal, but 20 percent would result in significant problems, and more than 30 percent could result in a restructuring of the industry similar to the 1980s. One of the major problems is that declines in land values not only result in foreclosures and loan losses, they also decrease the market value equity of all land owners.

Unfortunately, markets tend to overreact on both the upside and downside. Alan Greenspan referred to this response as irrational exuberance/fear and said that 80 percent of market economics are psychology. Experience has shown that when it comes to predicting financial problems, the debt:income ratio is a much better leading indicator than the debt:asset ratio. For example, the charts at the end of the article show that the debt:income ratio indicated problems starting to develop in 1977, while the debt:asset ratio didn't start reflecting any negative until 1981. The question is whether the drop in net farm income from \$87 billion in 2008 to a forecasted \$54 billion in 2009 is an aberration or the beginning of an extended downturn. If net farm income remains below \$60 billion in 2010 and 2011, there will be problems. If it falls below \$50 billion, the problems will be serious.

Another source of credit problems is that over the past 10 years, some lenders have moved into new types and areas of lending where they had no previous experience or expertise. In good economic times, no problems were apparent, but as conditions deteriorate, the weaknesses are beginning to appear. Unfortunately, at this point it's often too late. Not only can loans in these areas jeopardize the lending institution; but, performing borrowers also experience greater difficulty in getting their needs serviced as

the lending institution moves to limit its risk, increase its spreads to offset losses and its lending staff's time becomes consumed by fighting fires.

Obviously some areas and lenders are experiencing more problems than others, not necessarily because they are poorer lenders or their borrowers are poorer managers, but because of the nature of their market and location. Current examples include drought- or water-damaged areas, concentrated livestock areas and regions with large amounts of transitional property.

These changes point to several lessons for producers:

- A lender's request for more accurate and complete information should not be viewed as questioning the borrower's character; it's just a good business practice.
- Tougher credit standards will almost always follow new ownership or management of a lending institution. Such changes often indicate not that the new management is too demanding, but that the former management was too lax, which often explains why there is new ownership/management.
- Many of the stricter credit standards being adopted by lenders can be directly attributed to legislation passed during the 1980s that provided for additional borrowers' rights, mandatory debt restructuring, more liberalized bankruptcy laws and the increased threat of lender liability lawsuits. In response, lenders have been forced to be more selective about whom they finance. Because litigation usually arises from situations in which borrowers are highly leveraged or in financial trouble, it has become more difficult for higher risk borrowers to qualify for credit or for lenders to continue financing if a borrower's financial situation deteriorates significantly. Just as malpractice lawsuits have raised the cost of health care, the threat of legal action has changed the lending environment and caused lenders to become more cautious and conservative.

Many lenders have felt the impact of the recession through losses on participations purchased in loans originated outside the state. There are several banks and farm credit associations where over half of their charge-offs in 2009 and a significant portion of their adverse credit volume have resulted from loan participations. Loans on ethanol plants and commercial real estate are obvious problem areas. Others include loans for purposes outside the lender's area of expertise and loans where lenders relied too heavily on the lead lender or financial rating services.

Larger banks and farm credit associations that have defined benefit retirement programs are under additional stress to maintain profitability and rebuild capital. In some instances, 25 percent or more of their net earnings are being required to rebuild retirement funds that were depleted by the collapse of the financial markets.

The past 2 years in commodity, real estate and financial markets have made it abundantly clear that changes can occur quickly. We have also learned that Black Swan events are real. The tails of economic and financial distributions are larger than the assumptions of a

normal distribution. Most risk models capture only “normal” periods, and that includes the rating services such as Moody, Dun and Bradstreet. This experience has several lessons that need to be heeded in the future:

- Econometric models tend to be data dependent and backward looking. Boards and managers need to rely on judgment and experience and learn to look for leading indicators outside their immediate environment.
- Total enterprise risk management is critical, but implementing it is both expensive and easier said than done. Even the most sophisticated financial institutions are still basically silo risk managers.
- Although linear trends are good indicators of behavior and performance, they seriously underestimate the potential rate of change created by the external environment, including the impact of technological change. Tipping points often cause exponential rather than linear changes for both upturns and downturns. Timing is critical—for getting in, expanding, cutting back or getting out. The studies I have seen and my own experience indicate that timing is the main difference that separates the top 10 percent from the rest of the top 25 percent of managers and businesses.
- Employee and management incentive compensation systems need to be evaluated and redesigned. People ultimately do what they are incentivized to do. We have learned over time that incentives that focus too much on volume or cost minimization can be disasters. Even systems that focus on profitability have often failed to effectively factor in the risk:reward relationship, not just for the individual but also for the business. Prime examples are Wall Street trader bonus structures, the combining of commercial banking and investment banking enabled by the repeal of the Glass-Steagall Act, the lack of regulation of derivative markets, and executive golden parachutes that pay off even if the business is unsuccessful.