

# Agricultural Banking and Market Conditions

1<sup>th</sup> Quarter 2011

Federal Reserve Bank of Kansas City –  
Omaha Branch

April 15, 2011

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Soaring commodity prices and farm incomes strengthened agricultural banking conditions in the 4<sup>th</sup> quarter of 2010. Escalating farm income has quickly led to surging farmland values. While land values seem consistent with current economic fundamentals, the sustainability of today's farmland prices is dependent on the persistence of elevated incomes and low interest rates. Over the next decade, the U.S. Department of Agriculture (USDA) projects crop prices and returns to fall approximately 20-30 percent below current measures. It is also likely that interest rates will increase over the next few years. If realized, these factors would place significant downward pressure on farmland values.

Agricultural bankers surveyed by the Federal Reserve indicate that funds availability is high while loan demand remains soft. Farm debt held by banks grew slowly in 2010, at approximately 0.95 percent year over year. Still, surveys suggest that collateral requirements remain elevated and bankers are establishing more stringent underwriting guidelines to mitigate the risks associated with rising farmland values.

Agricultural banks<sup>1</sup> are in sound condition. Earnings at agricultural banks are significantly higher than earnings at the average bank in the U.S. and risk to capital at agricultural banks is comparatively low. The level of problem loans at all banks has grown over the last three years, but levels at agricultural banks remain manageable. Weaknesses that do exist in agricultural lending can be primarily attributed to exposures in the livestock industry—especially dairy, biofuels, recreational ranches, and transitional real estate with development potential. While risk to capital remains low at agricultural banks, the volatility of farm income and a possible farmland bubble are emerging concerns. Banks with exposure to agricultural loans should be establishing appropriate capital plans and ensuring that necessary reserves for loan losses are in place to properly account for exposures to unforeseen declines in farm income and farmland values.

## **Emerging Issues**

- Farmland values continue to rise amid concerns of a potential bubble. Banks with exposure to agricultural risk have become increasingly reliant on farmland collateral. Lower capital ratios at highly concentrated banks<sup>1</sup> could be problematic in the event of a downturn. Institutions with exposure to agricultural markets should ensure their loan policy includes formalized risk limits for farm real estate loans and have in place sufficiently robust processes to measure and monitor the potential impact of agricultural market fluctuations on the bank's collateral protection and capital needs.
- Livestock and dairy producers have endured a protracted period of market weakness, which has reduced borrower equity positions. Market conditions have improved, but producers remain exposed to rising feed costs and unstable prices.
- Surging grain prices place increased importance on grain elevator risk management practices as potential margin calls can test the liquidity of these operations.
- High funds availability and low loan demand, coupled with a decreasing rate environment, have led to very low interest rates on farm loans. Competitive pressures could lead to insufficient pricing for risk and relaxed underwriting standards.

<sup>1</sup> For the purposes of this report, "agricultural banks" are defined as banks with farm production and farm real estate loans equaling 25 percent or more of total loans. This definition is consistent with the FDIC definition of an agricultural bank. "Highly concentrated agricultural banks" are defined as agricultural banks having farm production and farm real estate loans equaling 300 percent or more of total capital. This definition narrows the population of agricultural banks to roughly the top one-third of agricultural banks.

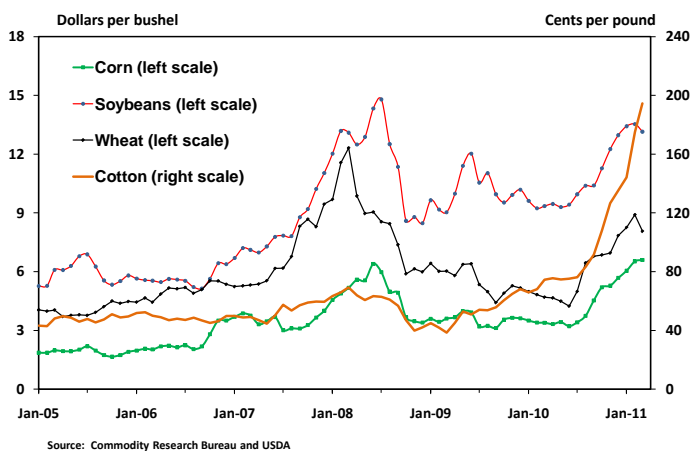
## Market Conditions

The farm boom is expected to continue in 2011. According to USDA, net farm income is expected to rise 18 percent in 2011. With strong global demand, crop revenues are forecasted to rise 14 percent with 3 percent gains in livestock revenues. Larger revenues will offset a 7 percent increase in farm production expenses, led by rising fuel, fertilizer, and feed costs.

Lean crop supplies are contributing to high, volatile crop prices. With global crop inventories at historical lows, crop prices remain elevated (Chart 1). However, a robust South American harvest and uncertainty surrounding U.S. crop planting intentions have limited crop price gains recently. Still, at these prices, large profits are expected for crop producers in 2011. In addition, retail prices for fruits and vegetables have moved higher.

Chart 1

### U.S. Crop Prices

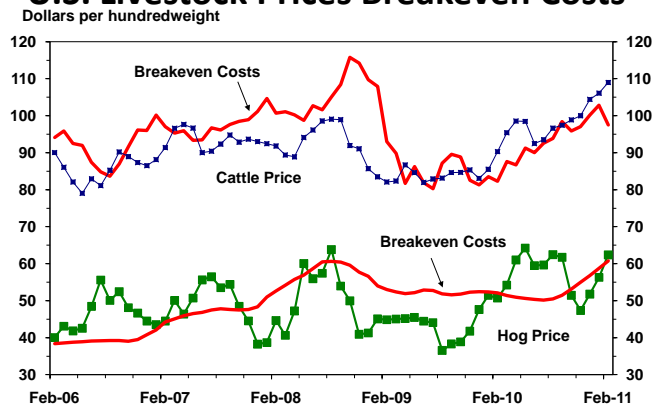


Rising crop prices will strain profits in the livestock sector. Since June 2010, feed costs have surged with rising grain prices. While demand for proteins remains strong, livestock prices and profits will be shaped by supplies. Dairy producers will face the biggest profit challenge due to large milk supplies. In contrast, beef producers have enjoyed stronger prices and profits after reducing herds over the past few years (Chart 2). Stronger pork prices have lifted profits, while high feed costs are shrinking margins for poultry producers.

Profit margins at ethanol plants have fluctuated widely in recent months. In 2010, ethanol prices rose with higher crude oil and gasoline prices. In addition, a surge in global sugar prices contributed to a sharp rise in the price of Brazilian sugar-cane based ethanol, in turn boosting exports of U.S. corn-based

Chart 2

### U.S. Livestock Prices Breakeven Costs



ethanol. As a result, U.S. ethanol production exceeded mandated levels under the Renewable Fuels Standard last year. Yet, in recent months, surging corn prices have strained profits. In addition, the 45 cent subsidy for ethanol blending is set to expire at the end of 2011 and political support for an extension is waning. The loss of the subsidy would trim ethanol profits further in 2012.

Finally, weather will be a primary driver of agricultural commodity markets. A severe drought in the Southern Plains is threatening the winter wheat crop in Texas, Oklahoma, and Kansas. Alternatively, strong winter snows in the Northern Rockies and Northern Great Plains threaten to cause spring flooding in the Missouri and Mississippi River valleys. With tight global supplies, abnormal weather patterns could fuel increased volatility in agricultural commodity markets in coming months. In fact, crop prices fluctuated widely in the week after the Japanese tsunami and nuclear issues raised concerns about food demand and supplies in Japan.

### Agricultural Financing

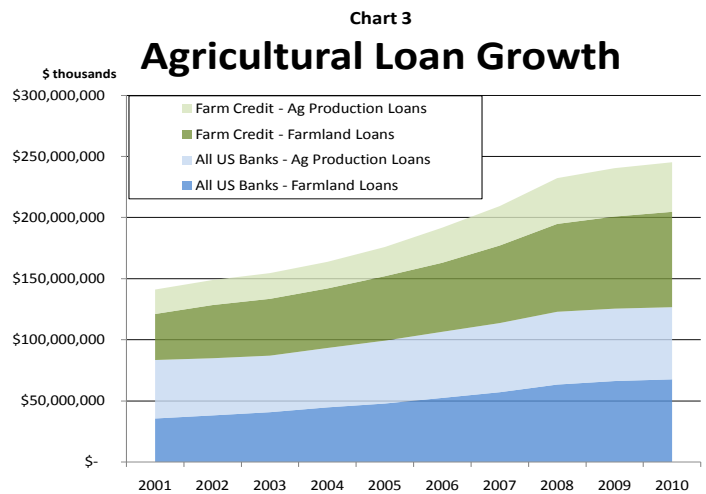
Robust farm income is boosting capital spending on equipment and the value of farmland investments. A 25 percent increase in 2010 U.S. net farm income spurred a 28 percent increase in four-wheel drive tractor sales last year. Tractor, combine, truck, and other farm equipment sales remain robust in the first quarter of 2011. Moreover, farmland values have jumped sharply in recent months, with Midwestern farmland values rising almost 20 percent above year ago levels at the end of 2010. Additional farmland values gains are expected in 2011. Farmers remain the primary buyers of farmland, although non-farm investor interest remains strong.

Strong gains in farmland prices have led to some questions about the sustainability of such high values. Fundamentally, land values should be based on the incomes they generate, both now and over the life of the asset and term of the loan. While the recent surge in farmland values has been prompted largely by increases in crop prices and the resulting income from the asset, the sustainability of farmland values will depend on future revenue streams (crop prices and income) and interest rates. Currently, the USDA projects rising farm income in 2011, followed by a short period of sharply declining commodity prices and returns due to improved global stocks. Prices and returns for commodities are expected to decline approximately 20-30 percent by 2013 from the highs of 2010. Subsequent to these short-term reductions, for the remainder of the 2011-2020 decade, prices for cash grains are expected to remain historically high and returns are expected to slowly rise, buoyed by world economic growth and sustained biofuel demand.

Anecdotal and survey information from bankers suggest that organizations are planning or have established restrictive underwriting practices to limit their institutions' risk to inflating land values. These practices include establishing a maximum price per acre on which the bank will lend (should the purchase price exceed this price, the customer must supplement the remainder with cash or equity in other real estate), lowering the bank's loan-to-value guidelines, or a combination of both. Loan terms offered by agricultural banks commonly include a five year fixed interest rate on a 20 year amortization schedule, making it difficult to compete with the Farm Credit System (Farm Credit) and other large lenders who offer lower-rate, longer-term fixed rate products.

Despite strong capital spending and sharp increases in farmland values, debt repayment has continued to improve and growth in overall farm debt has been slow over the last two years. According to Federal Reserve Agricultural Credit Surveys, agricultural bankers reported higher loan repayment rates and fewer loan extensions and renewals at the end of 2010. For 2010, farm debt held by all U.S. banks and Farm Credit<sup>2</sup> only increased a combined 2.01 percent, down slightly from the 3.51 percent increase in 2009 (Chart 3). According to the USDA, these two institutional groups hold over 80 percent of all farm debt. Given the disparity in their respective growth

<sup>2</sup> Data taken from the 2010 Annual Information Statement of the Farm Credit System.



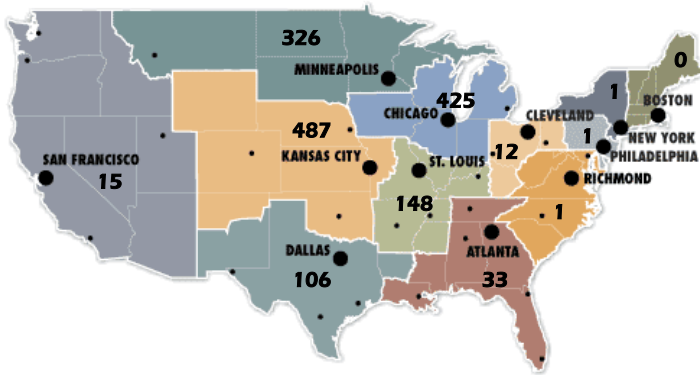
rates, it does not appear that increasing land values and escalating capital spending are being significantly fueled by leverage.

Given the low rate of growth in total farm debt, competition for loans is intense. The Agricultural Credit Surveys continue to note low loan demand and high funds availability. These factors, coupled with a declining interest rate environment, have driven rates on farm loans down significantly over the last four years. Interest rates on farm production loans at all U.S. banks are down, on average, 258 basis points (bp) or 32 percent since 2007. Farm Credit has been especially aggressive in pricing and its rates on farm production loans are down 300bp or nearly 40 percent in the last four years<sup>3</sup>. Agricultural banks have been slower to reduce rates and their yields are down only 25 percent since 2007. Rates received by Farm Credit on production loans in 2010 averaged 4.46 percent, 147bp below the average yield received by agricultural banks.

### **Agricultural Banking Conditions**

The number of agricultural banks across the country decreased slightly in 2010, moving from 1,563 at December 31, 2009, to 1,555 as of December 31, 2010. As demonstrated in the map below of the twelve Federal Reserve districts, a large portion of agricultural banks are located in the middle section of the country. The number of highly concentrated agricultural banks was also lower, moving from 510 banks as of December 31, 2009, to 465 as of December 31, 2010. The average asset size of the group of agricultural banks was \$128.2 million as of December 31, 2010, while the average size of all U.S. banks was \$1.8 billion.

<sup>3</sup> Author calculated using data taken from the 2010 Annual Information Statement of the Farm Credit System.



Overall, agricultural banking conditions are sound and continue to improve. Weaknesses that do exist can be primarily attributed to a long period of poor market conditions for livestock producers (including dairy) and weaknesses in the national economy as a whole. As of December 31, 2010, problem agricultural banks represent only 15 percent of all agricultural banks, while approximately 32 percent of all U.S. banks are problem banks.

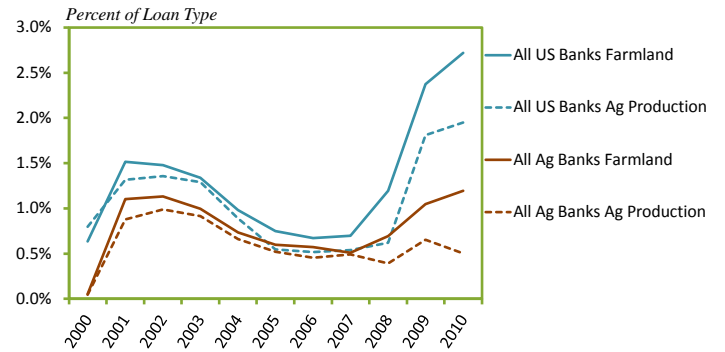
The financial performance of agricultural banks remains significantly better than the performance of the average U.S. bank. Due primarily to smaller exposures to commercial real estate, earnings at agricultural banks have benefited from stronger asset quality and fewer loan losses. The return on average assets for agricultural banks in 2010 was 1.00 percent, compared to 0.32 percent for all small banks. Highly concentrated agricultural banks fared even better, earning a return of 1.12 percent for 2010.

Capital ratios at agricultural banks have decreased from levels reported in the mid-1990s and the mid-2000s. Increasing loan growth at agricultural banks from 2004 through 2008 pushed capital ratios lower at these institutions. Capital levels at highly concentrated agricultural banks have not fluctuated as widely, but remain below other agricultural banks. However, risk to capital from problem loans at agricultural banks is notably lower than at the average bank in the U.S.

The level of problem farm loans at agricultural banks remains manageable and lower than problem farm loans at all U.S. banks (Chart 4). According to national lender reports, exposures to dairy, biofuels, recreational ranches and transitional real estate with development potential comprise a majority of problem agricultural loans at banks nationwide. Most of the problem farm loans are those that are secured by real estate. The higher level of problem loans at all U.S. banks is most likely caused by greater exposures to the weakened sectors outlined above,

which had credit demands beyond the lending capabilities of smaller banks.

Chart 4  
**Problem Ag Loan Rates**



Source: Reports of Condition and Income