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U.S. Agricultural Credit Conditions: Drought Strikes the Plains

Nancy Novack, Associate Economist, Regional Affairs

Nationally, agricultural credit conditions remain generally solid in 2006, despite battles with two familiar foes. Drought spread across America's Plains states, while higher input costs softened credit conditions in the nation as a whole. In response to Federal Reserve surveys of agricultural credit conditions, bankers reported that these two conditions raised concerns about farm finances in the first half of the year.

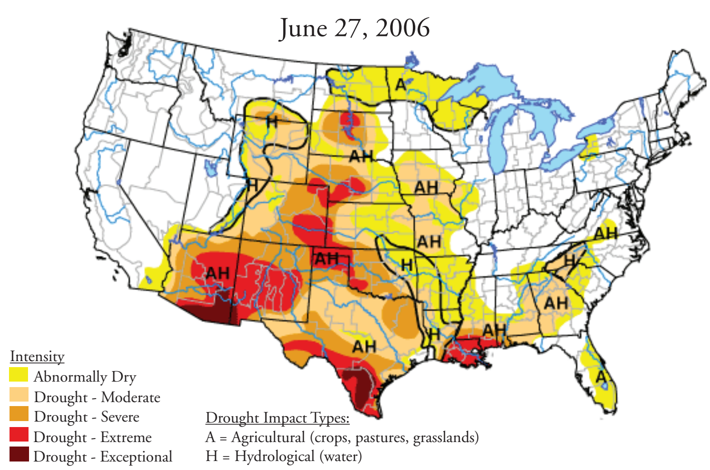
U.S. farm income is expected to decline from the record levels of the last several years, and the widespread drought could spell even larger income losses in some regions. The drop in farm incomes is expected to depress farm capital spending and raise the debt repayment capacity utilization ratio. According to survey results, repayment rates pulled back, while requests for renewals and extensions of existing farm loans moved higher. Farmland value gains began to moderate from record levels in some regions. However, bankers continued to report strong gains in areas with robust nonfarm demand.

Drought and higher input costs pinch farm finances

Plains states experienced another year of drought this year, leading to crop losses and poor pasture conditions, and intensifying the negative impact of higher input prices on farm finances. By midsummer, when second quarter surveys were conducted, drought was widespread in the Dallas and Kansas City districts and hitting pockets in the Chicago and Minneapolis districts (Map 1). Timely rains arrived in late summer, easing the drought conditions in time to boost fall crop prospects.

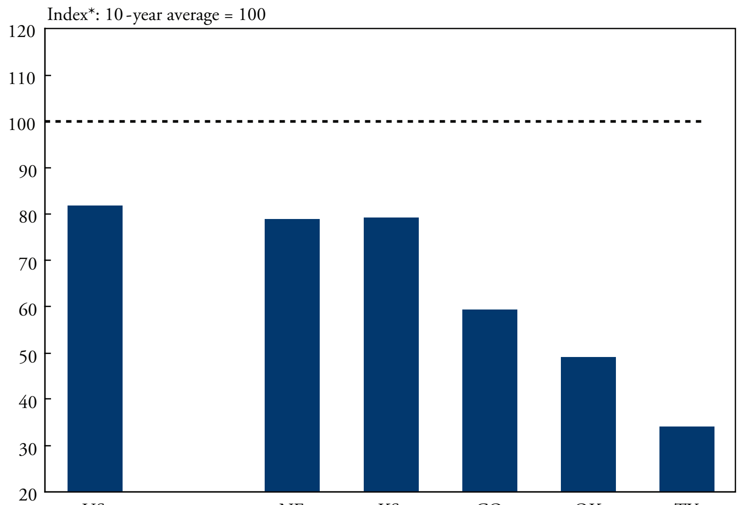
Wheat production in the nation's Plains states was hurt significantly by the drought. The nation's winter wheat crop was 80 percent of its ten-year average due to yield reductions and a high incidence of abandoned

Map 1
U.S. Drought Conditions



Source: http://drought.unl.edu/dm

Chart 1
2006 Wheat Production



Source: USDA
*Estimates

acreage (Chart 1). In the Kansas City District, wheat production was just 75 percent of its average. Oklahoma's crop was hit hardest in the district, amounting to just half of its average. Wheat harvests in Kansas and Nebraska were 80 percent of their average.

In the Dallas District, both wheat and cotton production suffered from severe drought. Wheat crops in Texas were devastated, managing just 34 percent of the state's average. Texas cotton also suffered, falling 36 percent below the record crop harvested in 2005. As the largest cotton-producing state, Texas contributed to a 14 percent decline in the nation's cotton crop from last year's record harvest.

Drought conditions also scorched pastures in major cattle-producing areas. In June, a third of the nation's pastures were in poor or very poor condition. That fraction climbed to more than half by late summer (Chart 2). Pastures in Texas, Oklahoma, Wyoming, and Nebraska were considerably worse than the national average. While pasture conditions have improved, many pastures remain vulnerable and will need additional moisture to recover.

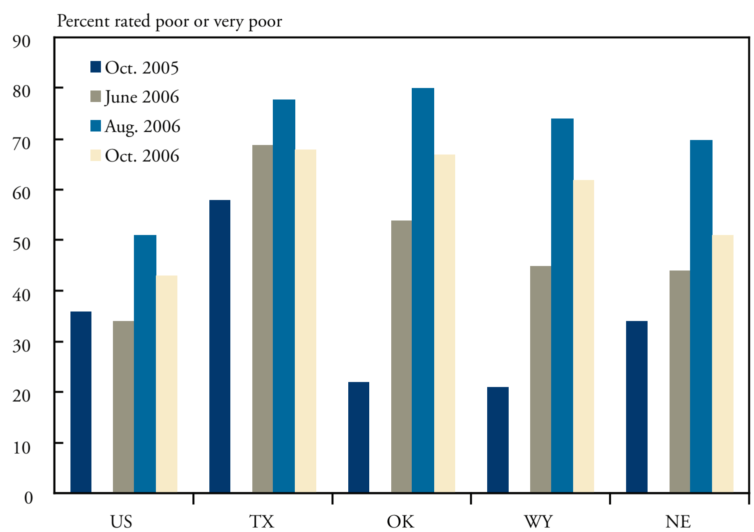
When pasture conditions deteriorate, cattle ranchers rely on hay to supplement their cattle rations. However, the 2006 hay crop is estimated to decline to its lowest level in more than 15 years.

The shortage of forage supplies pushed hay prices higher and weighed heavily on cattle ranchers. In severe drought areas such as Oklahoma and Texas, ranchers reportedly have been culling heavily and even selling off entire cattle herds. Some industry analysts suggest that these herd reductions could slow the expansion of the U.S. cattle herd.

Input costs have continued to move higher in 2006. USDA estimates that total cash expenses for all farming operations will rise 4 percent above 2005. The cost of fuels and oils is expected to experience the largest increase, rising 11.7 percent above a year ago. Interest charges, manufactured input costs, and fertilizer costs are estimated to climb more than 7 percent over last year. The prices paid index for fuel, calculated monthly by USDA, moved upward much of the year but pulled back recently. Early in 2006, the index for fertilizer

> **"Cow herds are being culled or sold. Hay prices are extremely high, as the supply is 50 percent of last year's. Crop production will be 50 percent below normal."**
>
> *— North Central Texas*

Chart 2
U.S. Pasture Conditions



Source: USDA

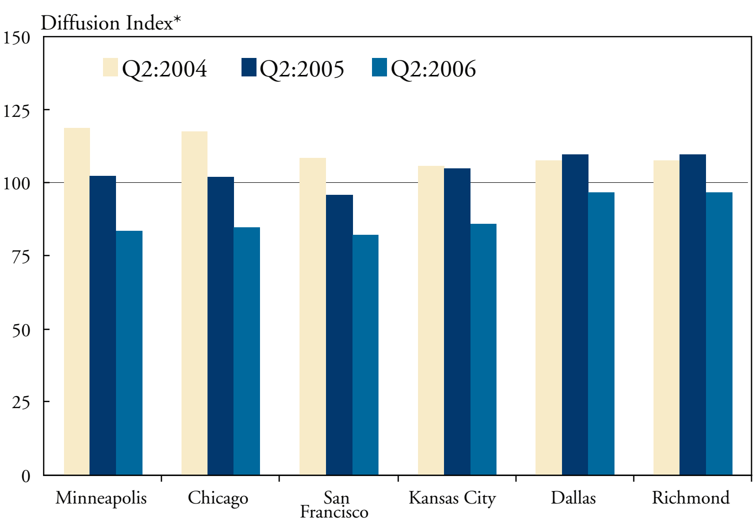
moved well above levels of previous years but since April has declined steadily.

The impacts of drought and higher input costs in combination with lower livestock receipts are expected to lead to a reduction in farm income. The latest USDA estimate indicates that U.S. net farm income will decline 27 percent from a year ago, falling just below the ten-year average. Lower livestock receipts, primarily from the dairy sector; fewer government payments; and higher expenses are expected to have the greatest effects on the farm income statement. Crop receipts are expected to rise, due to a large fall crop and stronger prices, but the severe drought will likely result in dramatic reductions in farm income in 2006.

Lower farm incomes are causing bankers and farmers to be cautious about capital spending. In the Kansas City and Minneapolis districts, expectations for farm capital spending in the third quarter were lower than in previous quarters

> **“Drought conditions are extreme, resulting in adjustments to cattle numbers and cropping plans.”**
> — *Southwest Oklahoma*

Chart 3
Farm Loan Repayment Rates



*Bankers responded to each item by indicating whether conditions during the current quarter were higher than, lower than, or the same as in the year-earlier period. The index numbers are computed by subtracting the percent of bankers that responded “lower” from the percent that responded “higher” and adding 100.

Sources: Federal Reserve Banks of Kansas City, Dallas, Minneapolis, San Fransisco, Chicago, and Richmond

Signs of weakening credit conditions

As a result of tighter farm finances, the midyear surveys of agricultural credit conditions showed signs of weakening credit conditions. The index of loan repayment rates fell in all of the district surveys during the second quarter, compared to a year ago (Chart 3). In the San Francisco District, one-fourth of bankers responding to the survey indicated that repayment rates were down from the same period a year ago. Approximately one-fifth of respondents in the Chicago, Kansas City, and Minneapolis districts reported lower rates of loan repayments. Anecdotal responses suggested that the decline was due to a drop in farm income from recent record levels, drought-related losses, and higher input costs.

The surveys also found that requests for renewals and extensions of existing farm loans rose in most of the districts. About one-fifth of respondents in the Chicago, Kansas City, Minneapolis, and San Francisco districts reported higher rates of requests for loan renewals and extensions relative to the previous year. In the drought-stricken Dallas District, the percent of bankers reporting an increase in loan renewals and extensions doubled from the same time last year. Again, the tighter cash flow situation made it more difficult for producers to repay debt obligations.

Farm loan demand generally rose across the nation. Loan demand in the Kansas City, Minneapolis, and San Francisco districts was stronger. Loan demand in the Chicago District increased, although at a slower pace. Bankers in the Dallas District reported lower loan demand overall, in part due to a decline in the demand for feeder cattle loans as ranchers in that region began culling their herds.

The challenges facing farmers in repaying their debt are reflected by the USDA’s Debt Repayment Capacity Utilization measure. This measure is the ratio of actual farm debt to the debt that could be serviced with current income. The ratio has trended downward since the early 1980s, reaching a near-record low of 43 percent in 2004, when farm income soared to a new high. In 2006, the ratio is expected to increase to 62 percent. This is still a healthy number, but the upswing corroborates the weaker trends in repayment rates and loan renewals reported in the Federal Reserve surveys and raises concerns about the health of farm finances going forward.

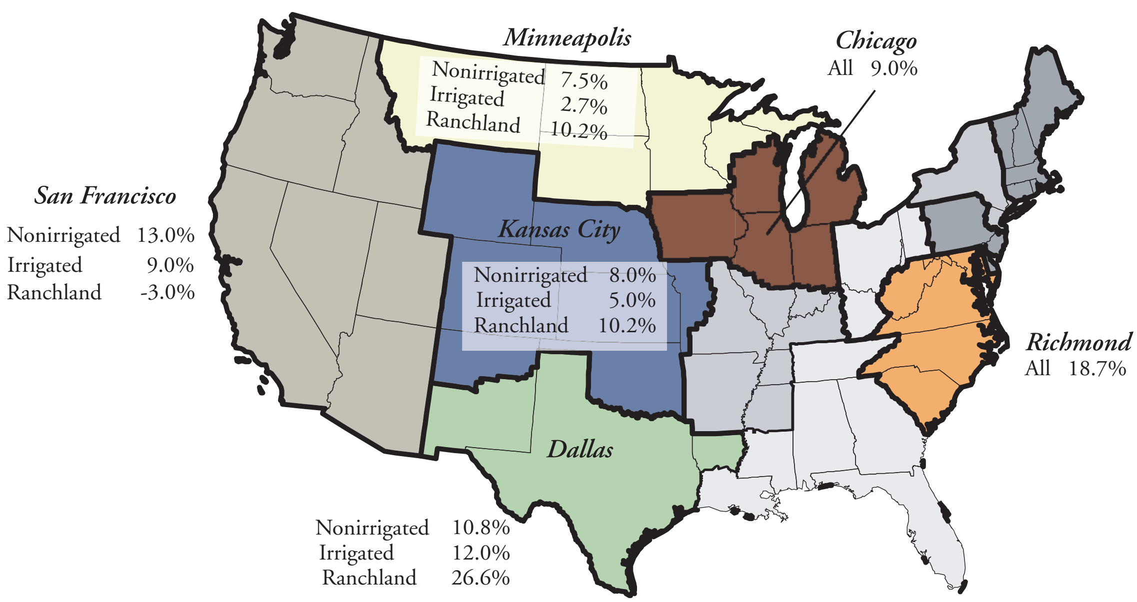
> **"We have been forced to use FSA guarantees to renew more lines this year than in the past and have had a higher percentage of farmers with carryover debt or no positive net income on operating lines than in past years."**
>
> — *Southern Idaho*

Moderation may be surfacing in land markets

A common question among agricultural analysts entering 2006 was whether farmland values would continue to post robust gains as in recent years. The expectation was that land markets would begin to cool, at least in some regions. Results from Federal Reserve surveys showed some signs of moderation in agricultural land markets in 2006, yet farmland values continued to rise at a strong clip. In the Chicago District, farmland values in the second quarter rose 9 percent over a year ago, slower than the 12 percent gain of last year (Map 2). Gains were also slower in the Kansas City District, where ranchland values, which have been driven by recreational demand, increased just over 10 percent, compared to 12 percent a year ago. The most significant slowdown in farmland values occurred in the Minneapolis District. At mid-2005, farmland values in the district posted double-digit annual gains across all land classifications, with ranchland values posting the strongest gains at 30 percent. Following the strong gains of a year ago, gains in farmland values moderated this year, with ranchland values rising 10.2 percent.

Although gains in farmland values moderated in some regions, they remained underpinned by nonfarm demand. In the Dallas District, recreation demand spurred robust gains in ranchland values, up 27 percent from a year ago, despite the severe drought. Although the slowdown in the housing market slowed demand for development lands, respondent bankers in many areas continued to cite nonfarm demand as a major factor underpinning farmland values. The bankers indicated that nonfarm demand, such as purchases with nonlocal money (in many cases for recreational purposes), were propping up

Map 2
Changes in U.S. Land Values



Percent changes are second quarter 2006 over second quarter 2005, except Richmond, which are first quarter data.
*Numbers for the San Fransisco and Richmond districts are computed from small samples, thus values tend to vary significantly.

Sources: Federal Reserve Banks of Kansas City, Chicago, Dallas, and Minneapolis (San Fransisco computed by Kansas City)

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>
> *— Northwest South Dakota*

land values in many regions. But rising interest rates and high input costs are limiting many farmers’ ability to make land purchases at the historically high prices.

Going forward, survey results suggested that the moderation will continue. The majority of respondents in the Chicago District expect stable land values in the coming quarter. Similarly, in the Kansas City District, fewer respondents than previous quarters expect land values to increase in the near term.

Summary

In 2006, agricultural credit conditions deteriorated. Drought gripped much of the Kansas City and Dallas regions, leading to crop losses and forage shortages for producers. High production costs also led to weaker agricultural credit conditions. While land markets started to show signs of moderating in many areas, most regions continued to post solid gains.

The impacts of the drought, a decline in livestock incomes, and higher production costs are all expected to contribute to lower farm income for agricultural producers. Lower livestock receipts will not lift overall farm income as in recent record-setting years. On a national basis, crop incomes are expected to rise moderately. Clearly, drought-stricken regions will face more significant declines in farm income. Historically, farm loan delinquencies are low and producers are generally in a favorable position to service their debt obligations. However, a cautionary tone to the industry’s outlook is beginning to emerge. Weaker credit indicators and uncertainty surrounding the next Farm Bill, especially in light of the nation’s budget gap and contentious world trade negotiations, suggest that agricultural bankers and their farm customers will be cautious going forward.

Fed Survey Summaries on the Web

Chicago: *www.chicagofed.org/economic_research_and_data/ag_letter.cfm*

Dallas: *www.dallasfed.org/research/agsurvey/index.html*

Kansas City: *www.kansascityfed.org/agcrsurv/Agcrmain.htm*

Minneapolis: *http://minneapolisfed.org/pubs/agcredit*

Richmond: *www.richmondfed.org/research/regional_conditions/agriculture/index.cfm*

Note: A Summary is not available for San Francisco, but additional information from their survey can be found at: www.federalreserve.gov/releases/e15/