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Department of Agricultural and Consumer Economics
University of Illinois at Urbana-Champaign

Financial Markets in Agriculture

Paul Ellinger and Bruce Sherrick

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Overview

The unprecedented events of the past two months have severely shaken global financial markets. Spillover effects from declining housing prices and increased subprime delinquencies eventually led to a freezing of global credit markets. Impacts on many large financial institutions included substantial liquidity and capital problems which in turn led to large-scale reorganizations among major banks and others in the financial services sector. Moreover, major stock indices have year-to-date declines exceeding 35%, the worst annual decline on record since the great depression.[1] A resulting concern relates to the impacts of these events on the firms serving the financing needs of the agricultural sector. This article provides an overview of major events affecting the health of the finance sector and identifies issues of importance to the related financial markets in agriculture.

Government Intervention

Congress recently passed the troubled asset relief program (TARP) designed to shore up the financial system by authorizing the purchase of up to $700 billion of illiquid assets from ailing financial institutions.

On October 13, the government announced the availability of $250 billion for direct equity investments through preferred stock purchases in financial institutions. One half will go to large international banks while the other half is targeted to regional and community banks. The move is intended to restore confidence and stability of the financial markets by providing direct capital relief. Treasury Secretary Henry Paulson summarized the severity of the problem and the rationale for such a significant move with his comments that:

> "*Government owning a stake in any private U.S. company is objectionable to most Americans – me included. Yet the alternative of leaving businesses and consumers without access to financing is totally unacceptable. When financing isn't available, consumers and businesses shrink their spending, which leads to businesses cutting jobs and even closing up shop.*"

Two other components of the current plan include temporary guarantees of senior debt and large non-interest bearing deposits at commercial banks. Beginning October 27, the government

[1] Dow industrial average YTD decline was 36% while the S&P 500 YTD is decline 35% as of October 10, 2008.

will fund purchases of commercial paper from high quality issuers. Commercial paper is a primary funding mechanism for corporations to finance their short term working capital needs.

These actions are in addition to previous announcements that the FDIC will extend their deposit insurance on deposits to $250,000. Additionally, the minimum capital regulatory framework was relaxed in certain cases for firms whose requirements to "mark-to-market" resulted in capital shortages due to unrealized losses on investments with downgraded ratings.

The interconnectedness among major financial institutions and with the global financial markets has accentuated the crisis worldwide. Central banks from other countries have also assisted financial institutions through infusions of capital and liquidity in addition to guarantees.

The market reactions to these announcements have been mixed, but generally positive. The U.S. stock market experienced a 1 day increase of 11% in the Dow on October 13. Commercial paper and interbank lending spreads have declined; an indication that large banks are more willing to lend to each other.

A key question currently facing farmers is how the economic disruptions and turmoil will impact the availability and cost of credit through their traditional lending channels. Another issue is how the recent government actions will impact lenders serving agriculture. To address these issues, we provide a brief overview of the two major lender types in agriculture and discuss potential impacts of the market distortions on their delivery of credit to farmers.

Agricultural Financial Markets

Agricultural lenders are generally in strong financial health. Most of the agricultural-related institutions did not participate in the higher-risk housing lending procedures of larger urban banks nor were they substantially invested in the structured securities that have lost substantial market value. Hence, most agricultural lenders have not incurred the huge losses of the Wall Street banks.

In comparison with other sectors of the economy, agriculture is generally characterized as using a low amount of debt relative to assets. The U.S. Department of Agriculture estimates total farm debt of approximately $211 billion at the end of 2007. Total assets in the farm sector exceeded $2.2 trillion resulting in a farm aggregate debt-to-asset ratio of only 9.6%.

The primary lenders in agriculture are commercial banks, the Farm Credit System, insurance companies, Farm Service Agencies and captive finance companies.

The Farm Credit System holds approximately 42% of the real estate debt and 31% of the nonreal estate farm debt. Commercial banks have the highest market share of nonreal estate farm debt (53%) while lending 38% of the farm real estate loans. (Figures 1 and 2).

Figure 1. Real Estate Farm Debt, 2007.

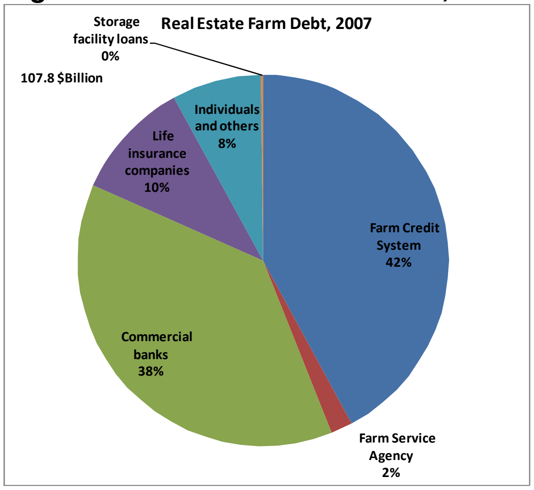
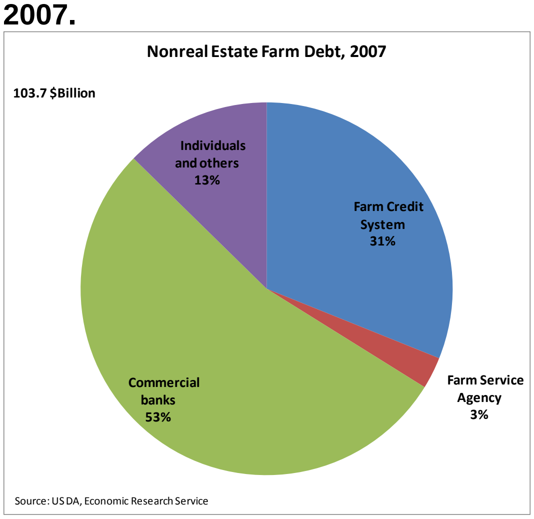


Figure 2 Nonreal Estate Farm Debt , 2007.



The following sections summarize characteristics of the two major lenders, and identify the primary areas of concern regarding the availability of credit and potential risks faced by these institutions in the current environment.

Commercial Banks

Commercial banks lending to agriculture are generally dominated by small, community banks that use local deposits as their primary source of funds. As a group, they have fared relatively well. Only 5% of "agricultural banks" had negative income during the first half of 2008 – a far smaller fraction than of all commercial banks. Moreover, over 50% of agricultural banks reported net income higher than the previous 6 month period.[2]

Table 1 provides summary information about commercial banks lending to agriculture. Over 78% of the volume and over 93% of the banks are from those less than $10 billion in asset size. Approximately, 18% of the banks lending money to agriculture are publicly traded or owned by a publicly traded bank holding company.

While these summaries indicate that community banks are a significant lender to agriculture, there remains some exposure to the issues facing larger banks through the remaining market share. The largest 15 banks lending to agriculture are reported in Table 2. These large banks hold approximately 20% of the total farm debt. These banks have been more exposed to the financial stresses occurring in the credit markets, hence their agricultural activities are not likely insulated from the effects of the current financial market disruptions either.

Table 1. Commercial Banks Lending to Agriculture by Asset Size.

Asset Size ($ Million)	Percent of Ag Loans at Commercial Banks	Number of Banks
Less than $100	16.09%	2,507
100-500	33.96%	2,677
500-1,000	10.44%	474
1,000-10,000	17.85%	347
Greater than 10,0000	21.66%	66

Source: Call and Income Reports, 6/30/2008

[2] Agricultural banks are defined by FDIC as banks that have 25% of their loan portfolio in agriculture.

Table 2. Largest 15 Banks Lending to Agriculture, June 2008.

	Loans Secured by Farm Real Estate ($000)	Nonreal Estate Agricultural Loans ($000)	Total Agricultural Loans ($000)
Wells Fargo Bank	$ 2,298,000	$ 5,061,000	$ 7,359,000
Bank Of America	1,395,453	1,325,665	2,721,118
Bank Of The West	775,373	1,611,853	2,387,226
U S Bank	788,882	1,084,962	1,873,844
Rabobank	1,348,721	491,479	1,840,200
Regions Bank	773,483	353,394	1,126,877
M&I Marshall & Ilsley Bank	725,463	388,266	1,113,729
Wachovia Bank	591,000	469,000	1,060,000
First National Bank Of Omaha	41,333	877,025	918,358
New Frontier Bank	346,710	402,182	748,892
Keybank	203,962	526,880	730,842
JPMorgan Chase Bank	191,000	524,000	715,000
National City Bank	245,168	265,917	511,085
Pinnacle Bank	180,608	309,293	489,901
Fulton Bank	380,599	106,031	486,630
	$ 10,285,755	$ 13,796,947	$ 24,082,702
% of all commercial banks	17%	24%	20%

Source: Call and Income Reports, June 2008.

Table 3 also shows the strong capital positions of the smaller institutions lending to agriculture. Only 13 of the 6,071 banks lending to agriculture were classified as undercapitalized by FDIC. In summary, the general health of commercial banks lending to agriculture remains strong, especially given the government's increased support of deposits and infusion of capital for larger institutions.

Liquidity measures and capital ratios are often used to summarize the health and capacity of a financial institution. One measure of the liquidity of a bank is the loan-to-deposit ratio. Table 3 shows the average loan-to-deposit level across the different sized groups of banks. The two smallest sized groups (representing 85% of the banks by number) have relatively low loan-to-deposit ratios and thus appear to be well positioned to continue to provide credit. Larger banks often use alternative sources of funds and have greater reliance on short-term debt instruments. These short term-borrowing markets have tightened substantially under the current economic conditions. However, the recent actions, announced on October 14, should ease related short term funding concerns.

Table 3. Liquidity and Solvency Measures for Commercial Banks

Asset Size ($ Million)	Loan to Deposits	Equity to Assets
Less than $100	75%	12.1%
100-500	86%	9.9%
500-1,000	94%	9.0%
1,000-10,000	105%	8.6%
Greater than 10,0000	149%	7.6%

Source: Call and Income Reports, 6/30/2008

Farm Credit System

The Farm Credit System (FCS), chartered in 1916, is a cooperatively-owned, government sponsored entity (GSE) that has a mandate to serve agriculture. It is a nationwide network comprised of five Farm Credit Banks that provide funding to 92 associations that in turn serve as direct lenders to farmers.

The Farm Credit System uses the capital markets to acquire funds by issuing consolidated system-wide FCS bonds and notes. Importantly, the market views GSE debt as being relatively safe, and generally requires modest spreads over Treasuries for placement of the debt.

The Farm Credit System associations have generally strong balance sheets and have experienced recent strong profitability. The capital positions and credit quality of the banks and associations remain strong through this economic downturn. However, the rapid recent growth of volume and concerns about capacity for future growth without undue capital dilution have been greater concerns than losses from either the credit or investment exposure within Farm Credit System institutions.

Farmer Mac, the GSE which serves as the secondary market for agricultural loans, did maintain a substantial investment portfolio, and did suffer substantial capital losses due to investments in Fannie Mae, Freddie Mac, Lehman Brothers, and similar securities. As a result of their exposure to these positions, they issued $65 million in preferred stock to increase their effective capital ratio. Importantly, the motivation for the recapitalization was not due to problems with the quality of their agriculture loan portfolio, but due to exposures to positions largely viewed as high-quality investment grade bonds just a couple of months earlier.

Commodity Credit Corporation (CCC)

Another source of credit for farmers is available through the Commodity Credit Corporation. Nonrecourse marketing assistance loans continue to be available from the Commodity Credit Corporation for farm-stored and warehouse-stored eligible commodities. Recourse marketing loans may be available for those commodities ineligible for a nonrecourse loan. The loans provide interim financing for producers at harvest time without having to sell their crop. The loans are 9-month loans with relatively low interest rates. The CCC loan program is administered by the Farm Service Agency.

Summary

These are truly unprecedented times in our economy and our policy makers are in uncharted waters. The government is using many tools and approaches to relieve the credit stress and liquidity problems in an attempt to restore confidence in the financial markets. To put the rarity of the economic situation into context, consider the probability of occurrence implied by the widely-recognized Bloomberg Financial Conditions Index, a quantitative measure of financial conditions relative to the average of the 1992-June 2008 period. The implied likelihood of the magnitude of the downturn experienced by this Index during the past month is over 9.5 standard deviations or approximately equivalent to winning the lottery twice in one week -- truly a “black swan” event. The high degree of uncertainty surrounding the current market situation makes any economic forecast difficult, including those implied by this analysis, but it is clear that in general, the financial health of agricultural lenders remains strong. The agricultural lending industry is also characterized by strong customer-borrower relationships. And, the institutions are well regulated in a manner to protect the safety and soundness of the institutions and the safety of the insurance deposit base. However, the economic downturn and declining interest rates have lowered profit margins in 2008 for agricultural lenders, and nonperforming and past-due loans have increased at most financial institutions. The strong current capital positions of agricultural lenders provides a buffer for these economic downturns.

For most agricultural lenders, the primary concern may not be a capital or liquidity issue in the sector. A larger concern for agricultural lenders will be the impact the current economic downturn has on the profit margins for producers. Rising input costs and cash rents, combined with lower commodity prices increase the operating fund needs and financial risks for producers and for lenders providing debt funds. Another concern involves the impact that shrinking margins will have on land prices and thus, on the financial health of their borrowers.

Given the current economic downturn, lenders and their regulators will be especially cautious. In response, regulators of agricultural lenders will likely require additional documentation about the quality of individual loans. Do not be surprised when your lender asks for financial information and cash flow projections. This reaction is not likely a response indicating a loss in trust, but rather a requirement from the enhanced regulations of banks.

You should certainly discuss any concerns you have about the financial performance of the institution with the management of your institution. In these times of higher revenues and costs, you should be comfortable with your financial partner.

Additional Information

If you are interested in the historical financial performance of your bank visit http://www4.fdic.gov/IDASP/. Farm Credit System institution financial reports can be viewed at https://reports.fca.gov/CRS/search-institution.asp.

The FDIC has a tool you can use to determine your insurance coverage at http://www4.fdic.gov/EDIE/.