Credit Impacts of the Financial Crisis

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2008 Illinois Farm Economics Summit
The Profitability of Illinois Agriculture: Looking Ahead in Extraordinary Times

"We pride ourselves on being a business school that keeps its curriculum up with the times."
How we got here: Quotes

“Credit is a system whereby a person who can't pay gets another person who can't pay to guarantee that he can pay.”
Charles Dickens

“Modern man drives a mortgaged car over a bond-financed highway on credit-card gas.”
Earl Wilson

“There is no such thing as a free lunch.”
Unknown

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Henry Paulson

“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.”

May we live in interesting times

- Bloomberg Financial Conditions Index
- October
  9.5 std. dev.
  = winning lotto
    2 times in one week

Today
7.5 std. dev.
Growth of the crisis

- Seeds of crisis
  - Risk taking in housing
    - Homeowners
    - Lenders

- Fertilized by
  - Low interest rates
  - Leverage on leverage
  - Financial innovations
    - Lenders
    - Investors

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Acceleration of growth of the crisis

- Global spread
  - Accentuated by leverage
  - Interconnectedness of financial/investment markets
  - Counterparty risks
  - Lack of transparency
  - Just how big?
  - Evolution of reliance on short-term funding markets/mechanisms

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Source: Business Week

For current data: See NY Fed Dynamic Maps
Bank Run

Old fashion
- Depositors get worried
- Withdraw deposits
- Bank runs out of liquidity
- Liquidate assets

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Bank Run

2008 version
- Investment banks funded by short-term debt
- Invest in new mortgage based instruments
- A stressed/constrained/failed bank has to sell instruments at fire sale prices
- Other stronger institutions may have to value their securities at these prices, reducing asset value
- Short-term debt providers concerned about valuation and stop lending
- No confidence in market – flight from risk

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What about Agriculture?

Debt Service to Farm Income

If income drops 33% no change in debt
**Farm Debt to Asset Ratio**

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<th>Good Times</th>
<th>Bad Times</th>
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*Economic Research Service*

**Debt to Asset:**

**Illinois Farmers**

- Greater than 60%: 5%
- Less than 10%: 23%
- 40% to 60%: 18%
- 20% to 40%: 34%
- 10% to 20%: 20%

*Illinois Average: 27%*

77% less than 40% Debt to Asset
How Much Debt?

- Start with your net income (3 year average)
  - Add depreciation and interest
  - Multiply by 3-5
  - Adequate range of debt to be serviced by cash flow being generated
- Debt to Asset levels below 40%
- Interest Expense/Gross Revenue below 15%

Lenders to Agriculture

- Farm Service Agency: $2.05 billion
  - Individuals and others: $8.617 billion
- Life Insurance companies: $1.452 billion
- Commercial basis: $40.598 billion
- Farm Credit System: $45.356 billion
- Farm Credit System: $55.475 billion
- Farm Credit System: $32.252 billion

Economic Research Service | Real Estate | Non Real Estate
Total Farm Debt

$215 Billion

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Perspective of $215 Billion

Source: WSJ

Does not include other sectors of the supply chain

Does not include
Asset bank commercial paper MM Mutual Fund facility
Temporary guarantee for MM funds
Credit Availability
Primary Sources of Funds

Community Banks
Regional and Large Banks
Farm Credit System
Insurance Companies
Captive Finance
Government

Equity & Earnings
Deposits
Short - Medium Term Borrowings
Issue Bonds and Notes
Premiums
Asset Backed Securities

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Individual Lenders in Production Agriculture

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How Many Farms Does It Take?
Value of Ag Output - $200 Billion

389 Farms
30,495 Farms
34,085 Farms
3,201 Farms
2,000,000 Farms

0% 10% 25% 50% 100%
How Many Banks Does It Take?
% of Commercial Bank Loans to Agriculture

15 Banks
474 Banks
821 Banks
332 Banks
5,184 Banks

0% 20% 40% 50% 100%

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Crisis Initial Impact on Commercial Banks

- Dog bone
  - Farm and bank size
- Regional differences
- Fed actions
  - Insurance & Capital infusions
- Potential for enhanced documentation/underwriting/regulation
- Potential exposures to interest rate risk

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Farm Credit System

- Government Sponsored Entity (GSE)
- Strong capital position
- Acquires funds via capital markets
  - Unintended consequences of gov’t actions
  - Funding costs spreads have increased
  - Longer term bonds harder to place
  - Vulnerabilities: Securities portfolio & Pilgrims Pride
- Key lenders to elevators/input suppliers
- Growth in some assn. slowed by Farmer Mac limitations

Farmer Mac

- Another agricultural GSE
- Guarantee portfolio quality remains strong (11/10)
- Focus on increasing capital
- $65 Million infusion from Farm Credit System
  - Investments in Fannie and Lehman, impairment losses $97 million
- FCS standbys now more limited
- Similar issues in funding to Farm Credit System
Insurance Companies

- Typically, larger real estate loans
  - Dependence on larger farms access to working capital
- Some evidence of scaling back new lending
  - capital and earnings related

Captive Finance Suppliers

- Asset back security market dried up
- Commercial paper more limited
- Input suppliers facing cash flow stresses of volatile product prices
Summary: Agricultural Lenders - Shorter term

- Current financial health, in general, strong
- Credit generally availability for traditional farmers
- 2008 farmer earnings/payback in Midwest relatively secure
  - Grain farmers v protein markets
- Increased risk spreads, partially offset by cost of funds declining

Summary: Agricultural Lenders - Shorter term, cont.

- Longer term fixed-rate financing may be limited
- Largest impact on credit availability will likely be the affects the economic crisis has on profit margins and land values
- Operating lenders may feel impact first if cash rents don’t adjust
Summary: Other Issues in the Ag Finance Landscape

- Some agribusiness financing concerns:
  - Ethanol
  - Grain elevators
  - Input suppliers
  - Trade letters of credit
- If crisis deepens, domino potential in agriculture

Challenges: Producer Risk Pipeline

- Commodity price risks
- Input price risks
- Cash rent
- Interest rate risks
- Counterparty risks

Pushed back to producer
Financial Strategies to Fly Above the Turbulence

- Monitor and maintain liquidity
- Internal budgeting
- Understand risk management alternatives
- Communication with your lender/land owner
- Plan for higher income taxes

Thank You

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It is almost next year!!