U.S. Farmland Values: Is This Cycle Different?
A wide range of farmland values in the western Corn Belt.

Nebraska and Iowa Farm Real Estate Values
1900

$Dollars per Acre
Constant 2011 dollars

0 - $499
$500 - $999
$1000 - $1999
$2000 - $2999
$3000 and up

Source: USDA
WWI and the “Golden Era for Agriculture” boost farmland values.

Nebraska and Iowa Farm Real Estate Values
1920

$Dollars per Acre
Constant 2011 dollars

- 0 - $499
- $500 - $999
- $1000 - $1999
- $2000 - $2999
- $3000 and up

Source: USDA
Farmland values decline during the “Roaring 20s”

Nebraska and Iowa Farm Real Estate Values 1930

$Dollars per Acre Constant 2011 dollars

- 0 - $499
- $500 - $999
- $1000 - $1999
- $2000 - $2999
- $3000 and up

Source: USDA
The Great Depression pushed down farmland values further.

Nebraska and Iowa Farm Real Estate Values
1940

$Dollars per Acre
Constant 2011 dollars

Source: USDA
Enhanced productivity and rising exports lifts farmland values during the 1950s and 1960s.

Nebraska and Iowa Farm Real Estate Values 1969

Source: USDA
The Russian grain deal sparks the farm real estate boom.

Nebraska and Iowa Farm Real Estate Values
1974

$Dollars per Acre
Constant 2011 dollars

- 0 - $499
- $500 - $999
- $1000 - $1999
- $2000 - $2999
- $3000 and up

Source: USDA
By the late 1970s, farmland values are “hot”.

Nebraska and Iowa Farm Real Estate Values
1978

$Dollars per Acre
Constant 2011 dollars
0 - $499
$500 - $999
$1000 - $1999
$2000 - $2999
$3000 and up

Source: USDA
Higher interest rates and reduced exports begin to cool land values.

Nebraska and Iowa Farm Real Estate Values
1982

$Dollars per Acre
Constant 2011 dollars

Source: USDA
At the end of the crisis land values are back to 1969 levels.

Nebraska and Iowa Farm Real Estate Values 1987

$Dollars per Acre
Constant 2011 dollars

- 0 - $499
- $500 - $999
- $1000 - $1999
- $2000 - $2999
- $3000 and up

Source: USDA
Farmland values surge again.

Iowa and Nebraska Farm Real Estate Values

Dollars per acre (2011 constant dollars)

- Iowa (Left Scale)
- Nebraska (Right Scale)

Calculations based on USDA data
The Drivers of Past Farm Booms/Busts

- **Demand Shocks**: Persistent demand shocks lead to high land values and capital investment.

- **Supply Shocks**: Persistent supply shocks that lead to production expansions reduce prices.

- **Interest Rate Shocks**:
  - Lower interest rates associated with higher incomes.
  - Lower interest rates yield lower capitalization rates.
Is farmland over-valued?

Value-to-Cash Rent Multiple for IA, IL, IN Cropland, 1967-2011

Sources: IL and IA compiled from NASS Reports, IN from Purdue Land Value Survey
What made the 1940s different?

U.S. Corn Prices and Farm Real Estate Values

Dollars per acre (Constant 2011 dollars)

Dollars per bushel

Source: USDA
Farmers deleveraged during the 1940s.

Real U.S. Farm Debt

Billion dollars (constant 2005 dollars)

- Non-real-estate Debt
- Real Estate Debt

Source: USDA and Agricultural Finance Databook
Farm debt appears to be concentrated.

- KS Farm Management Farms:
  - Average Debt-to-Asset Ratio
    - 1979 – 24.6%
    - 2010 – 26.8%
  - Debt-to-Asset Ratio >40%
    - 1979 – 19.4%
    - 2010 – 25.6%
  - Debt-to-Asset Ratio >70%
    - 1979 – 1.3%
    - 2010 – 5.9%

Source: Featherstone (2012)
How will debt levels evolve?

The Wealth Effect in U.S. Agriculture

• With high wealth and low interest rates, farm capital investments remain strong.
• Farm leverage increases as farmers use debt not income to finance investments.

U.S. Farm Income and Capital Spending

Source: USDA
Conclusions

- Booming incomes and low interest rates fuel record high farmland values.
- Farm sector debt remains low, but it is concentrated.
- The wealth effect is fairly strong in U.S. agriculture.
- Will farmers resist the temptation of low interest rates and high land values and not leverage the farm?