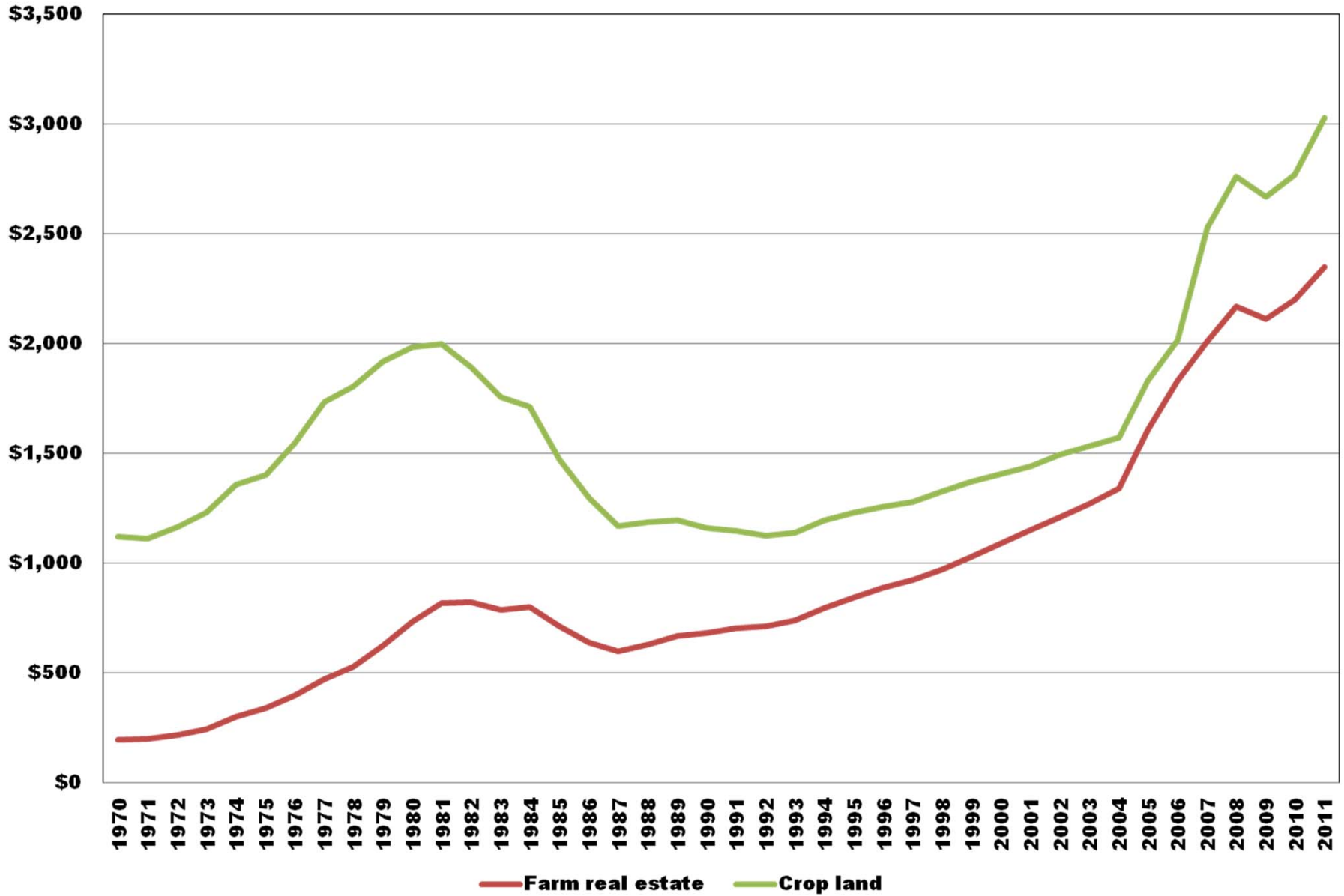




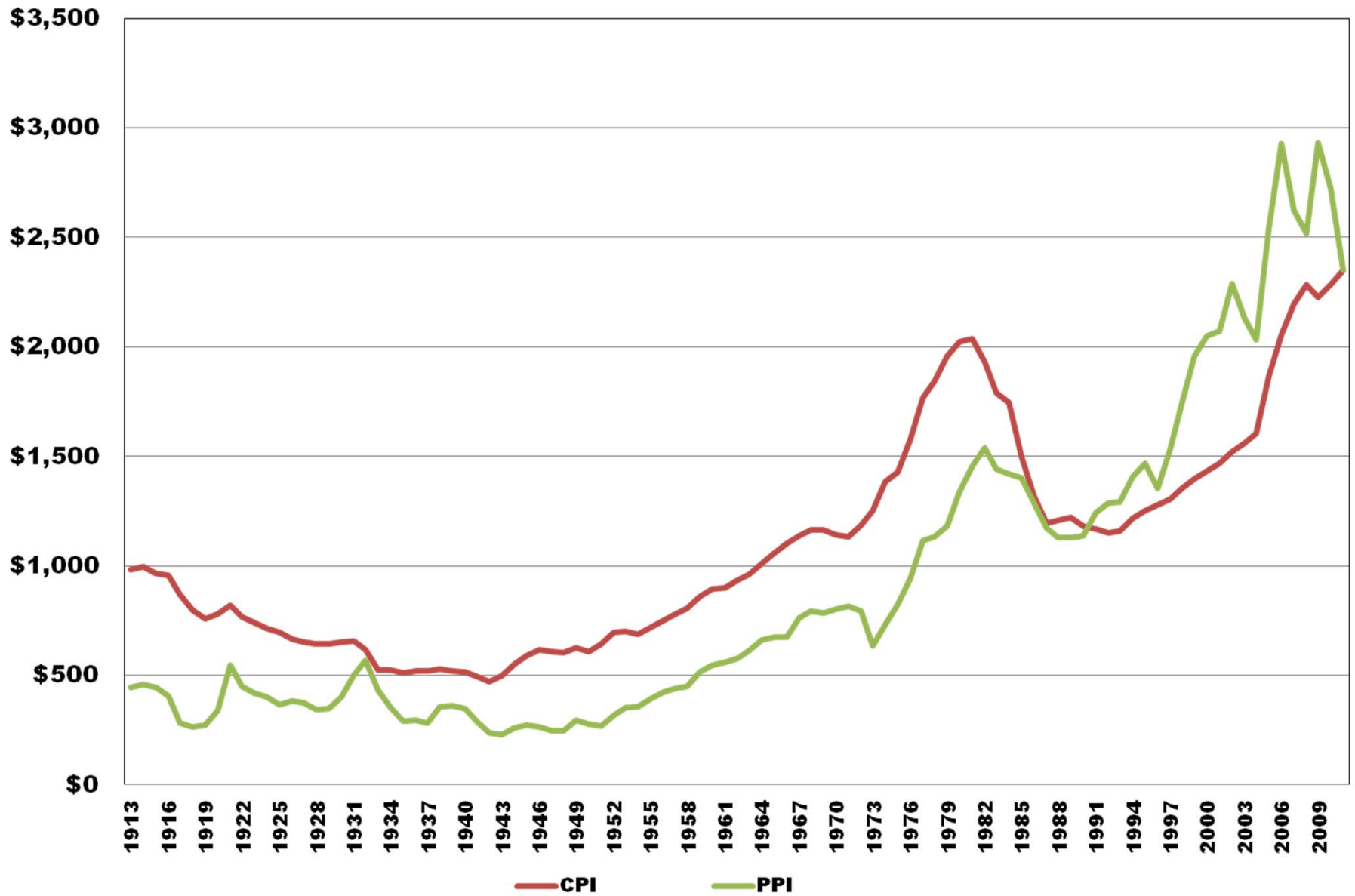
Overview of Forces Shaping Land Asset Values

Mike Duffy
Iowa State University

U.S. Farm Real Estate and Crop Land Values



Inflation Adjusted U.S. Land Values Using CPI or PPI





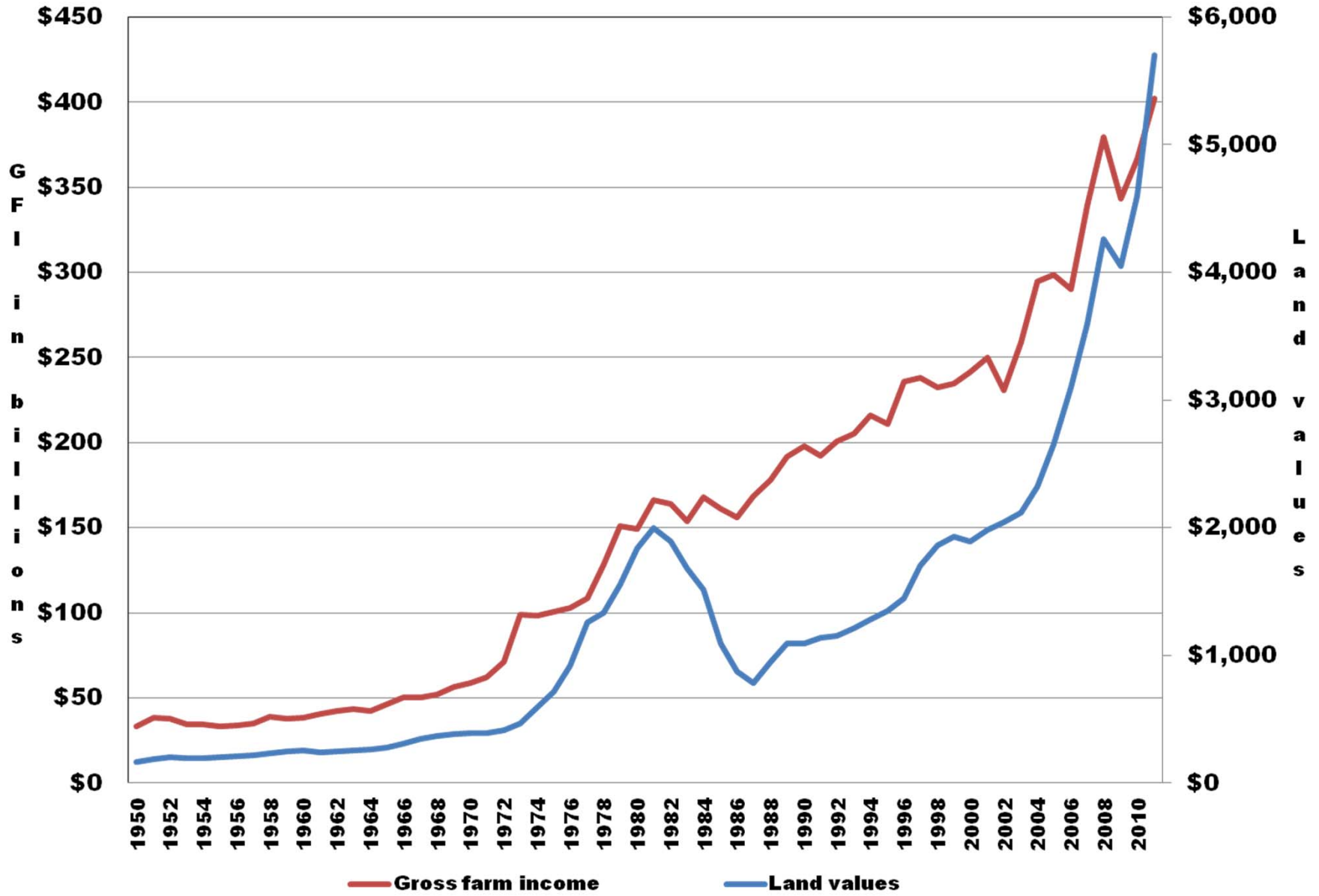
Driving Forces Behind Land Values

- Income
- Interest rates
- Lack of alternative investments
- Strong commodity demand
- Strong demand for land

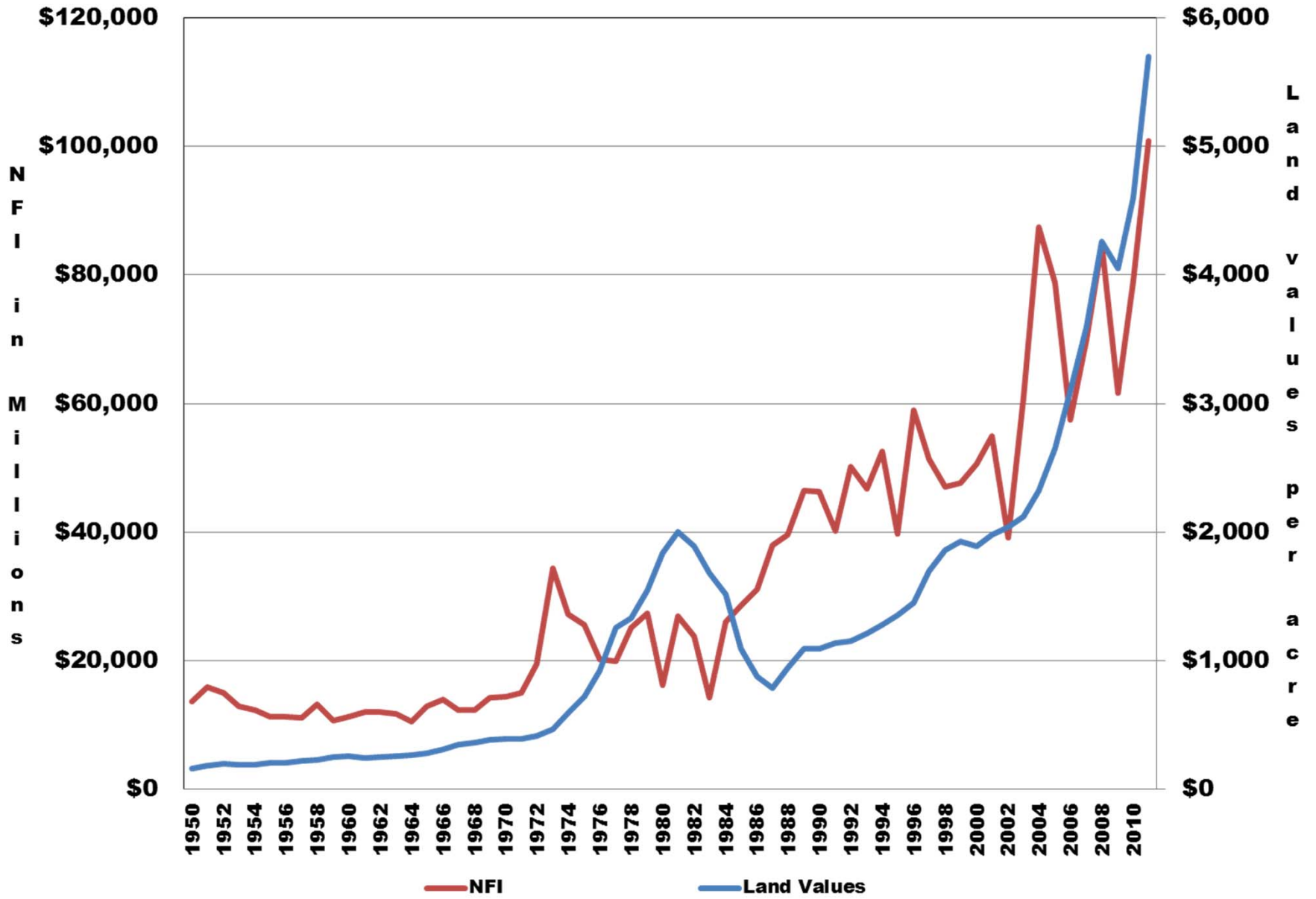


Income

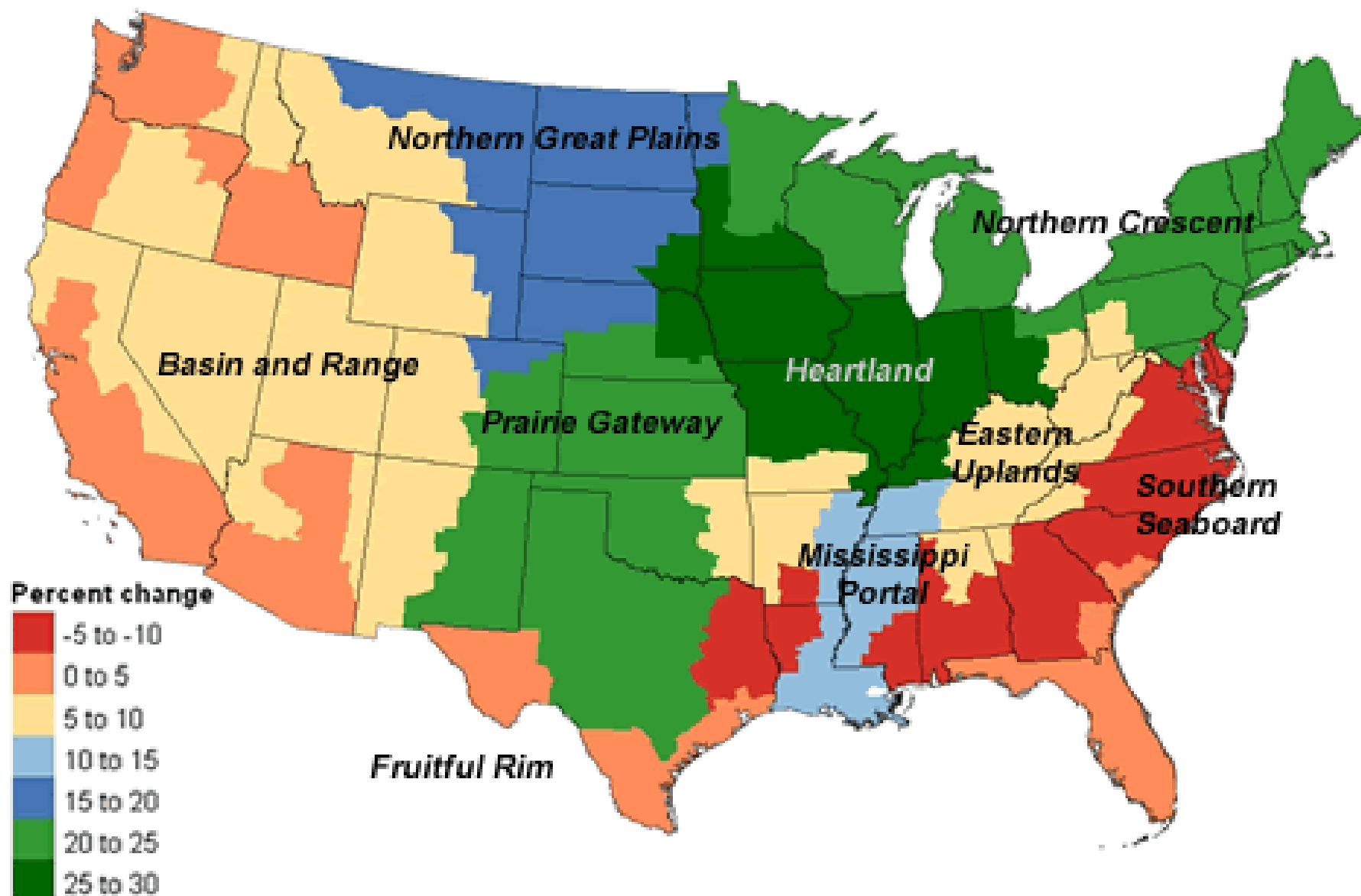
U.S. Gross Farm Income and Land Values



U.S. Net Farm Income and Average Land Values

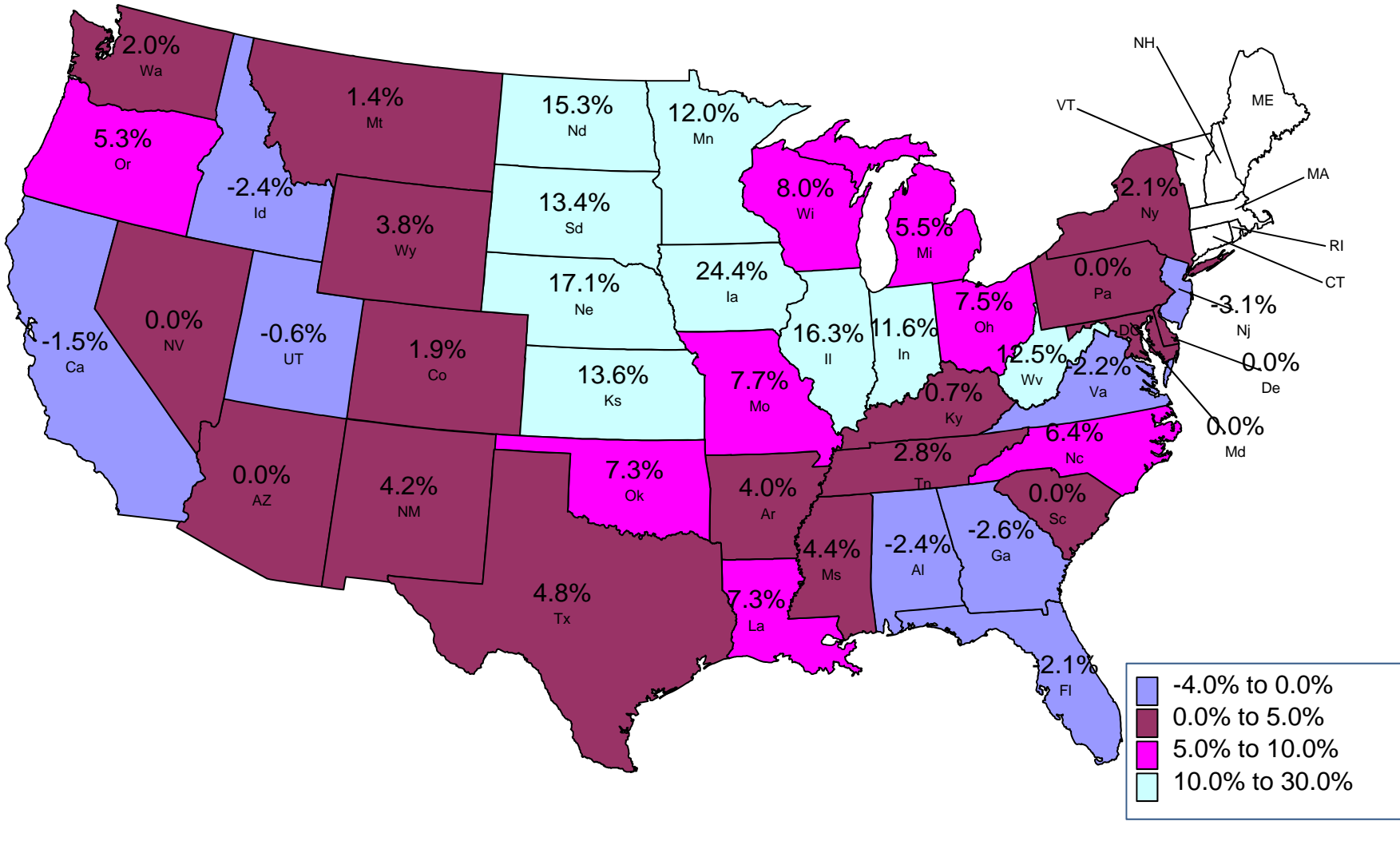


2011 farm business net cash income forecast compared with 2010



Source: ERS partial budget model based on the 2010 Agricultural Resource Management Survey (ARMS) using parameters from the sector forecasts.

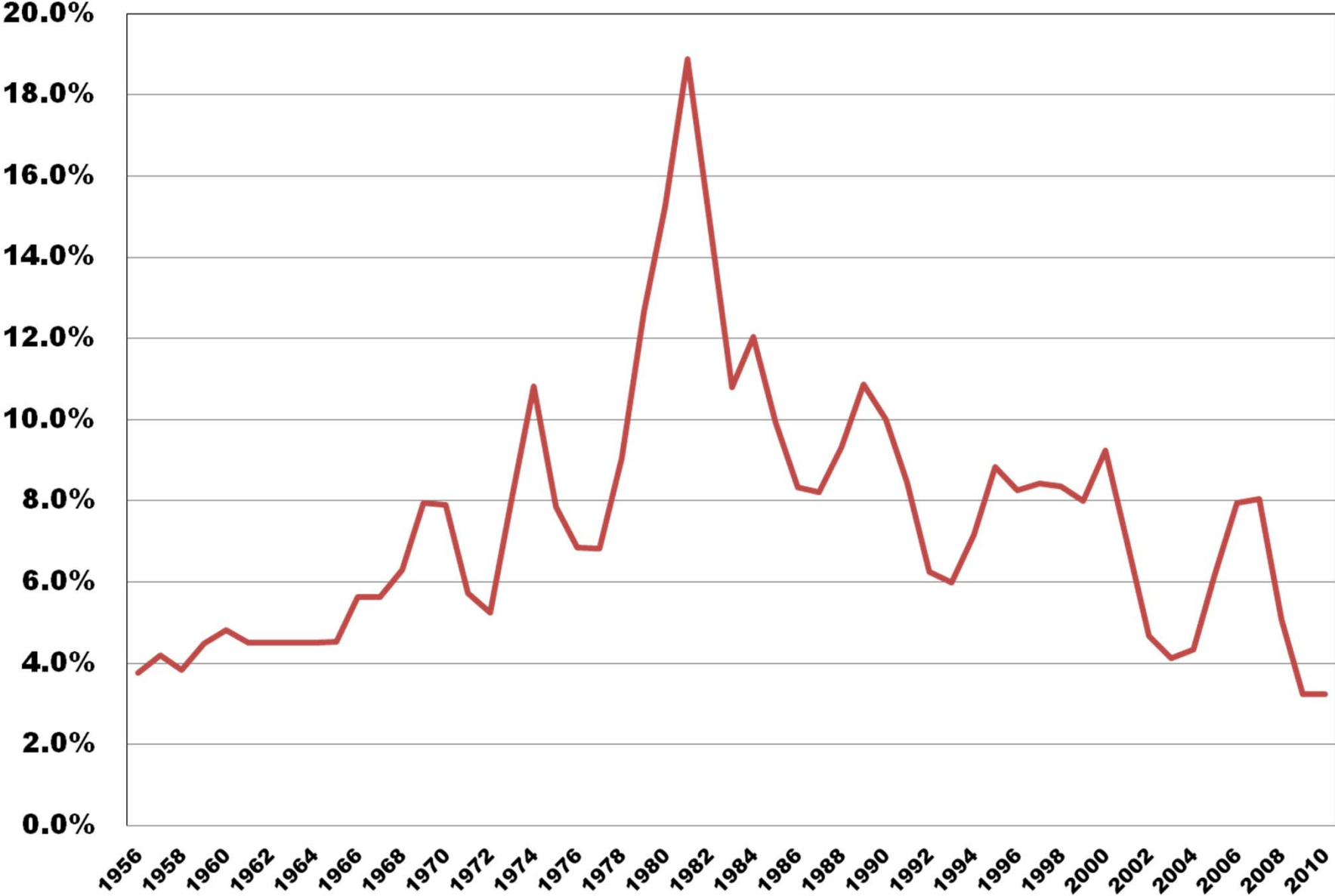
Percent Change in Land Values 2010 - 2011



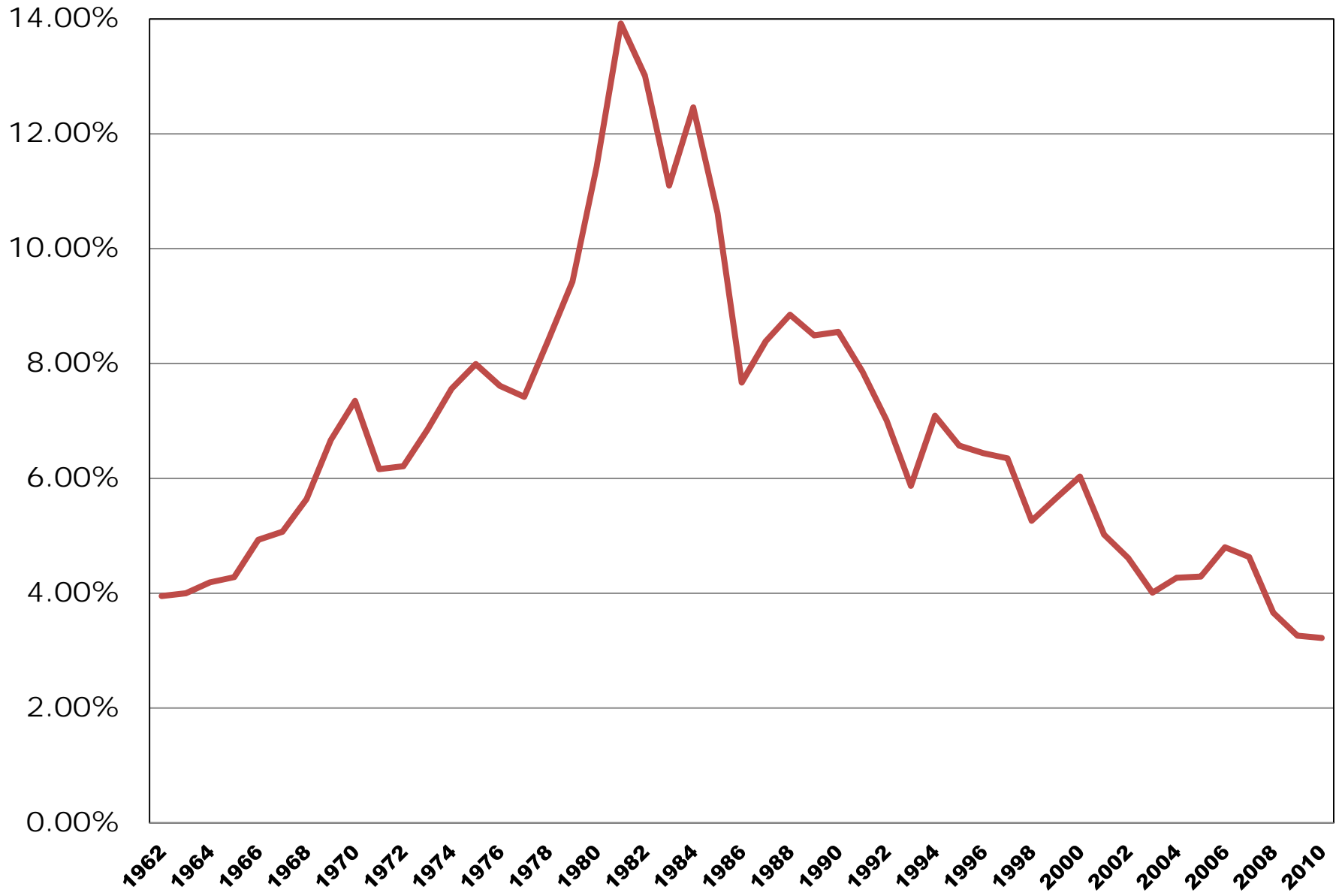


Interest rates

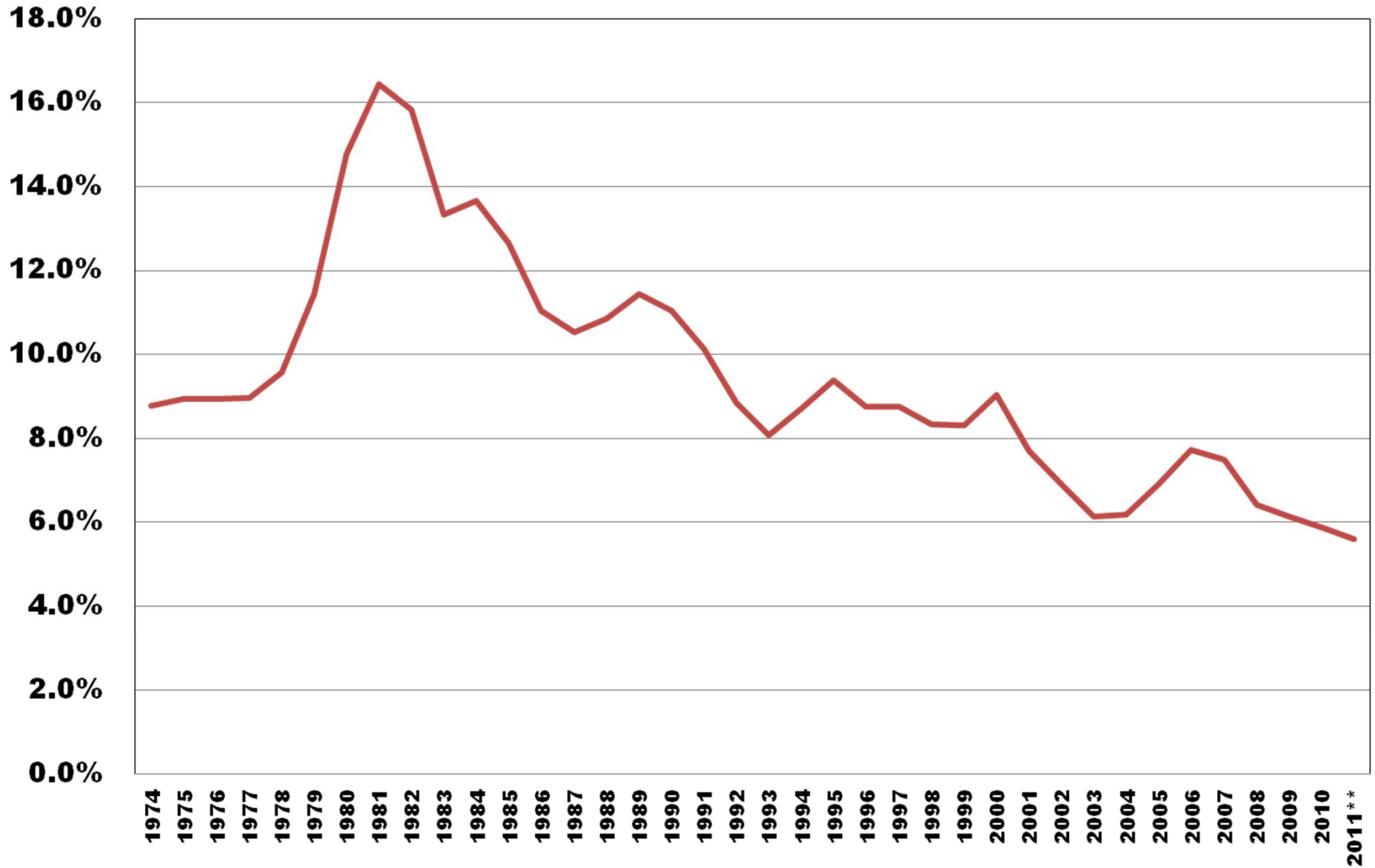
Bank Prime Rate



Market Yield on 10 Year U.S. Treasury Securities



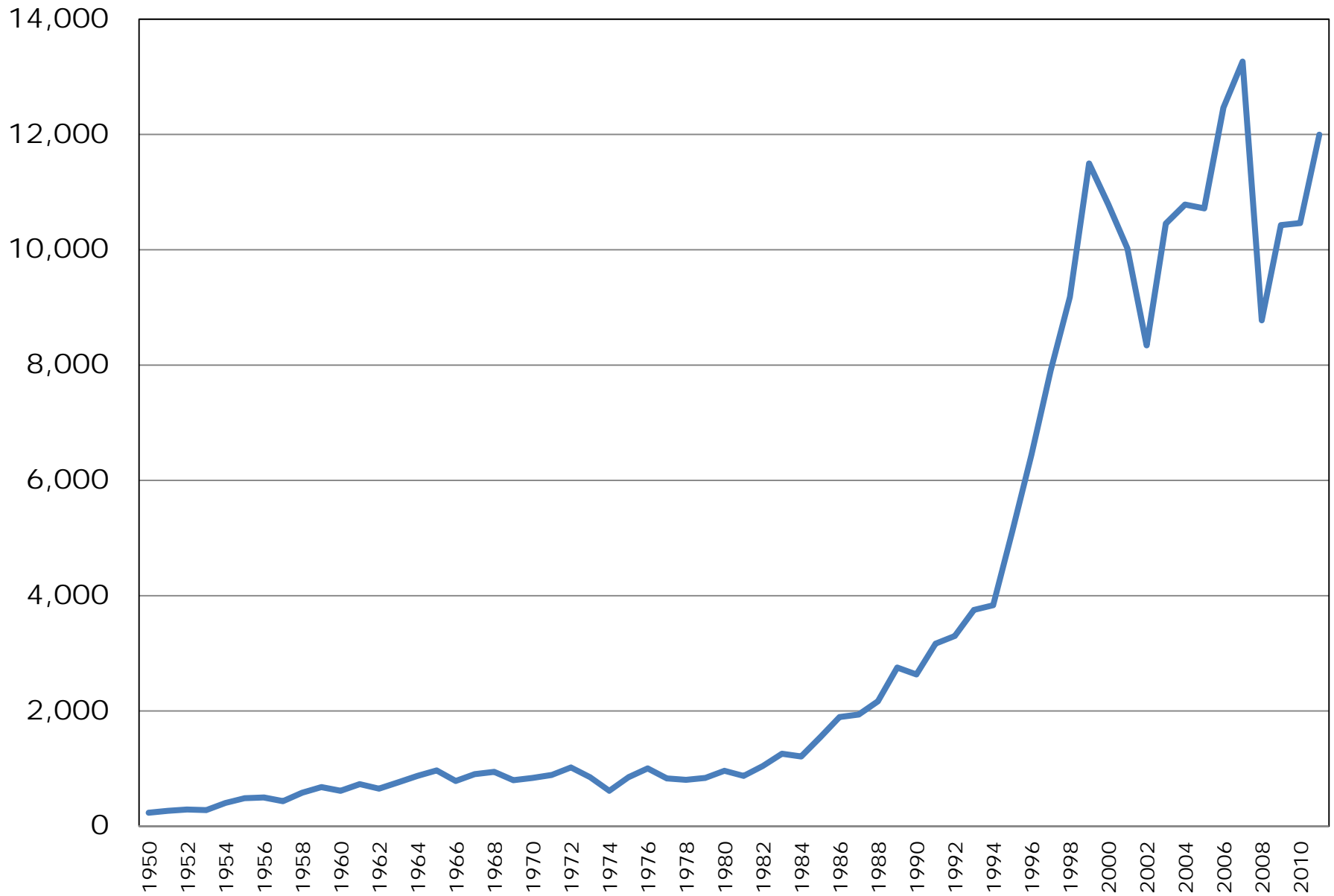
Real Estate Interest Rates in 7th Federal Reserve District



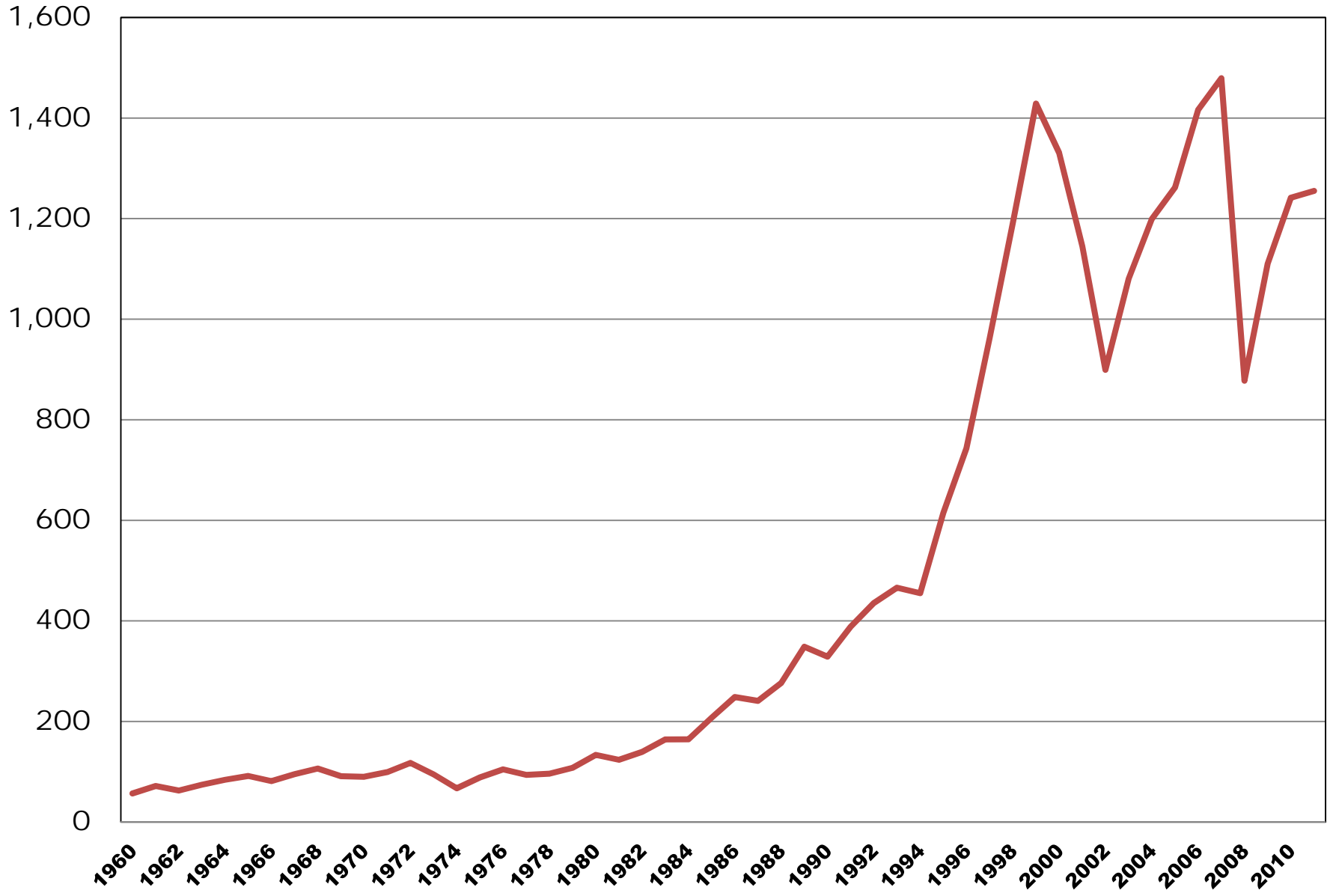


Lack of Alternative Investments

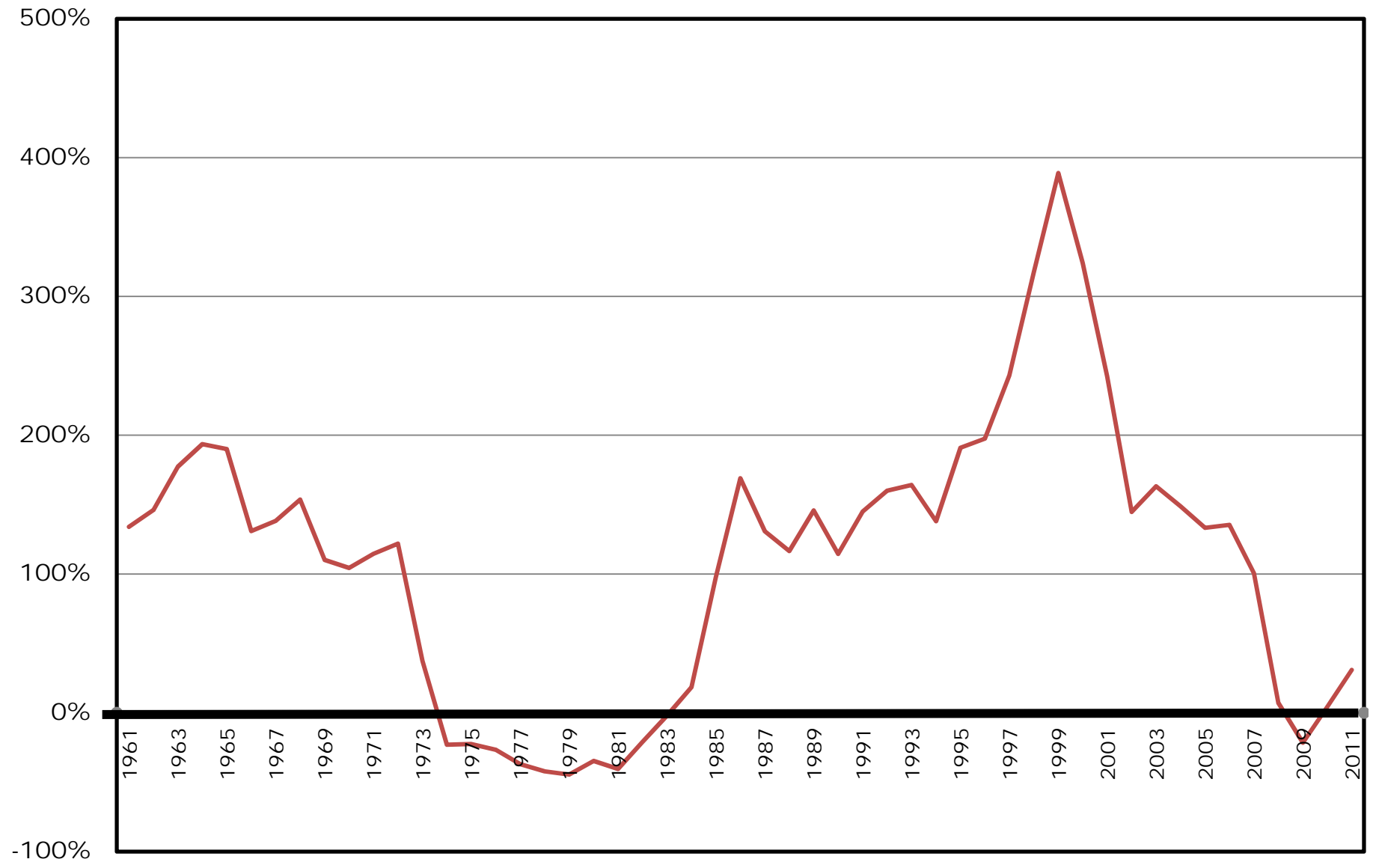
Annual Closing Dow Jones Industrial Average



Closing Values for S&P 500



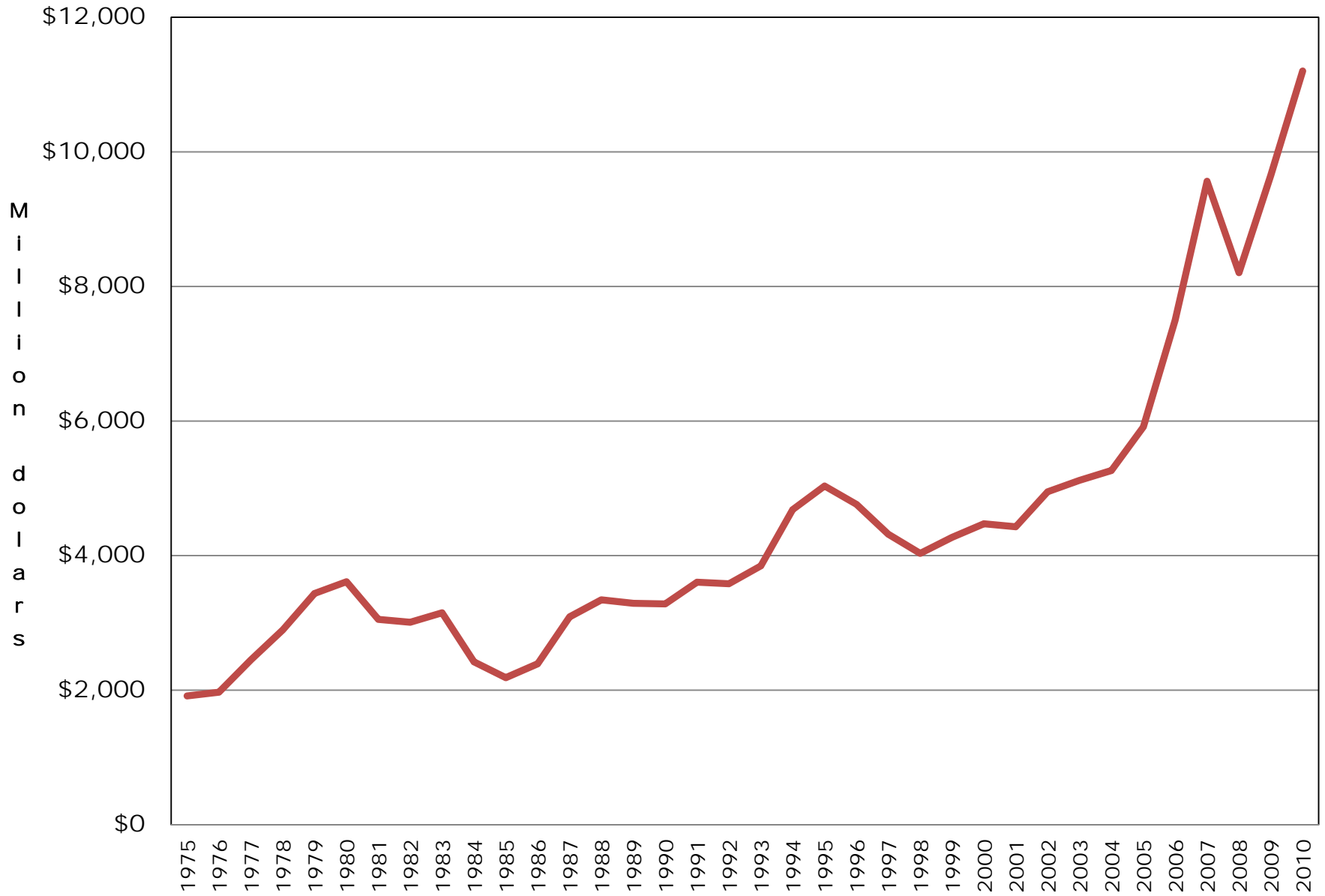
Value of an Investment made in Iowa Farmland as a Percent of an Investment in the S&P by Year of Investment



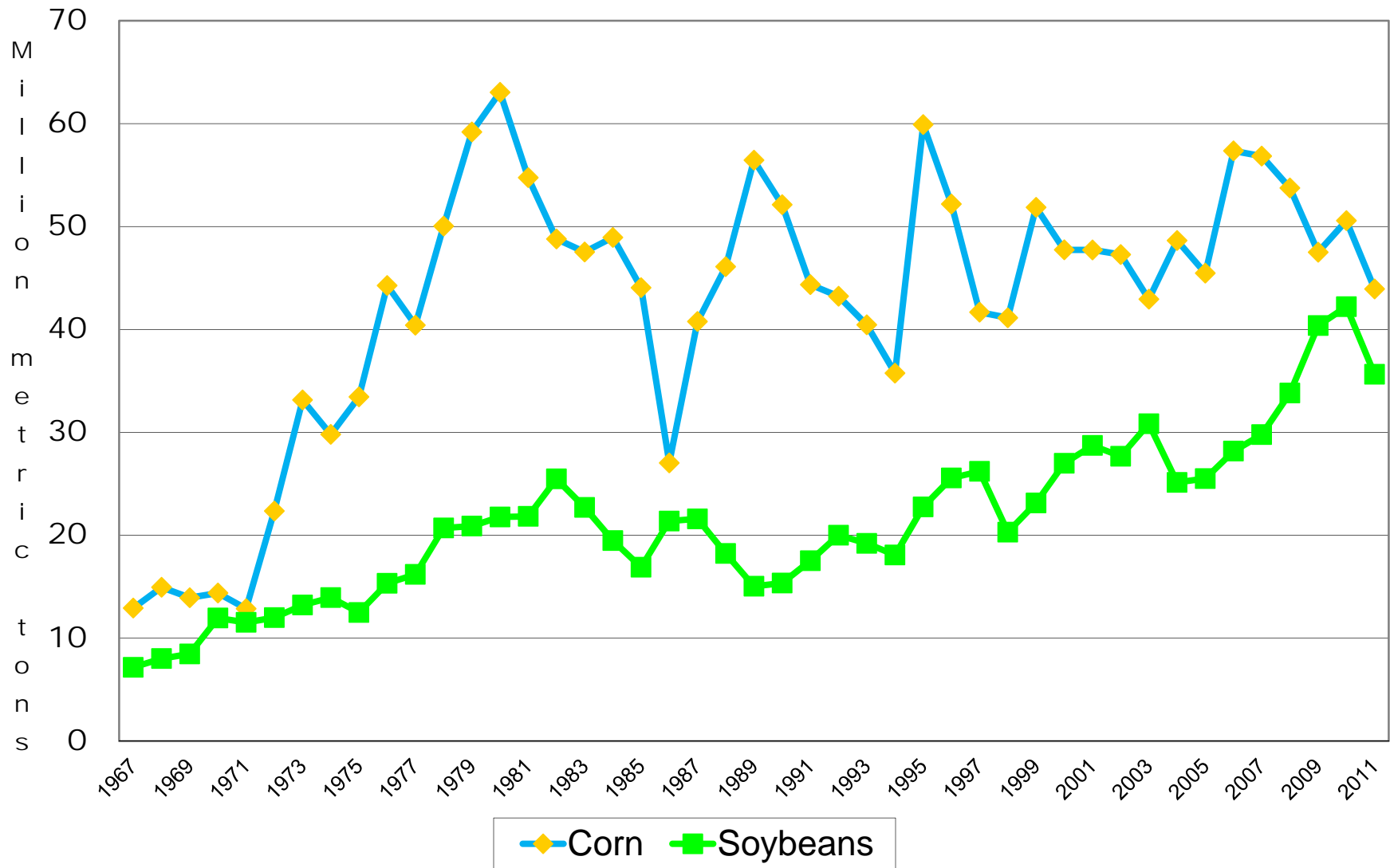


Strong Output Demand

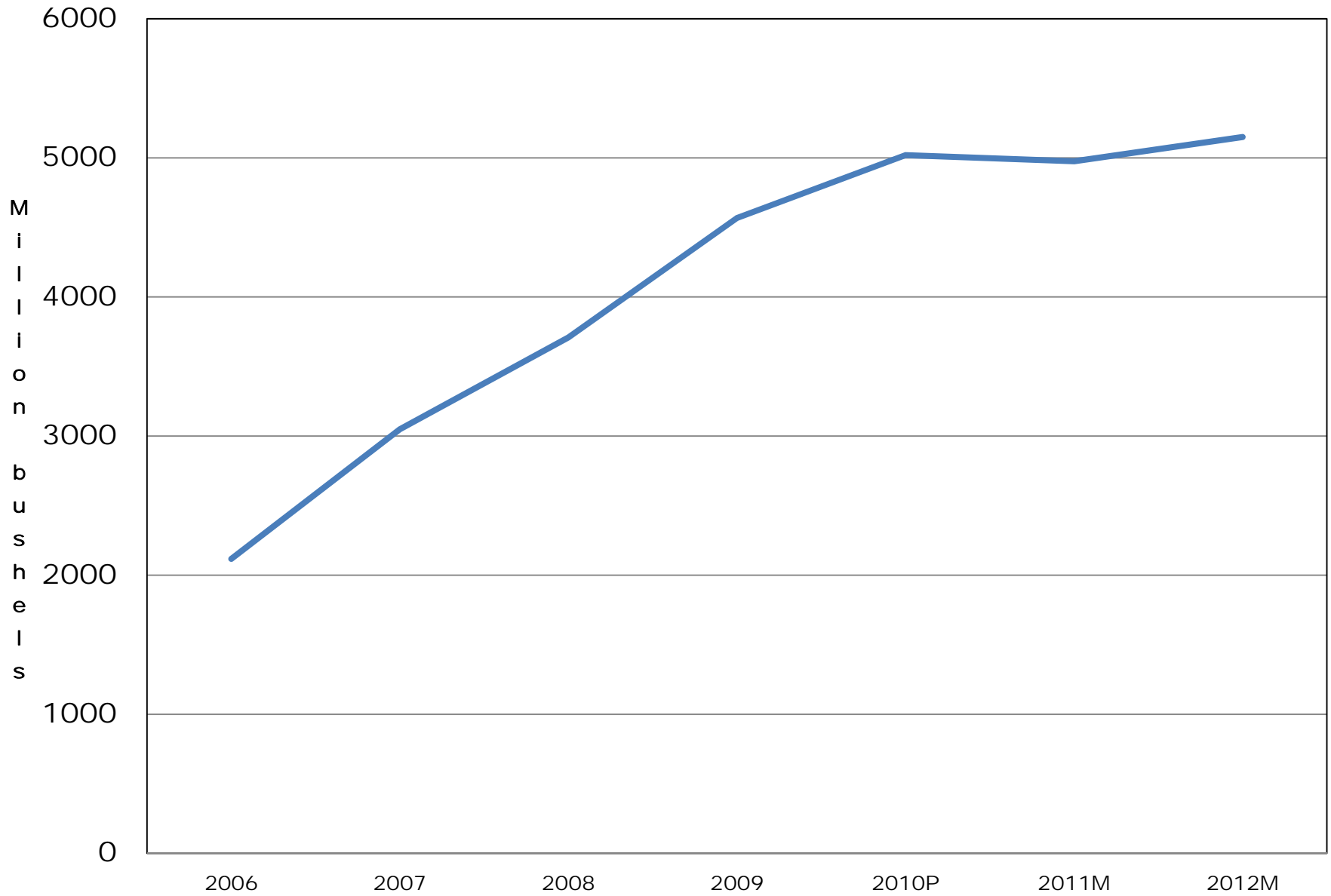
Value of U.S. Agricultural Exports



Quantity of Corn and Soybeans Exported



Corn Use for Ethanol Production



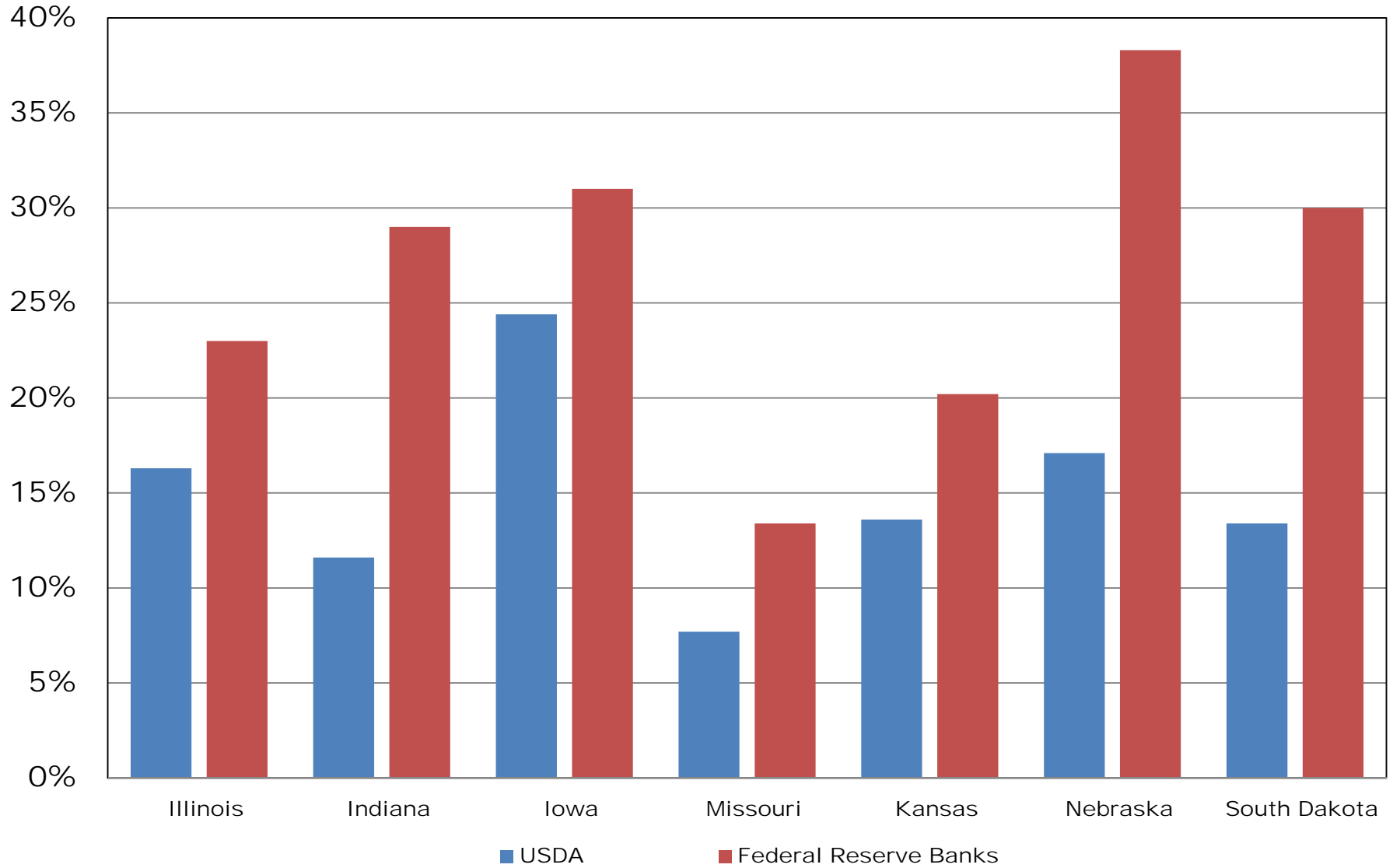
Current Factors to Consider

- Level of debt
- Income
 - Cost of production increases, especially rent
 - Changes in demand; exports and legislation
- U.S. economic conditions
- World economic conditions
- Impact of high land prices

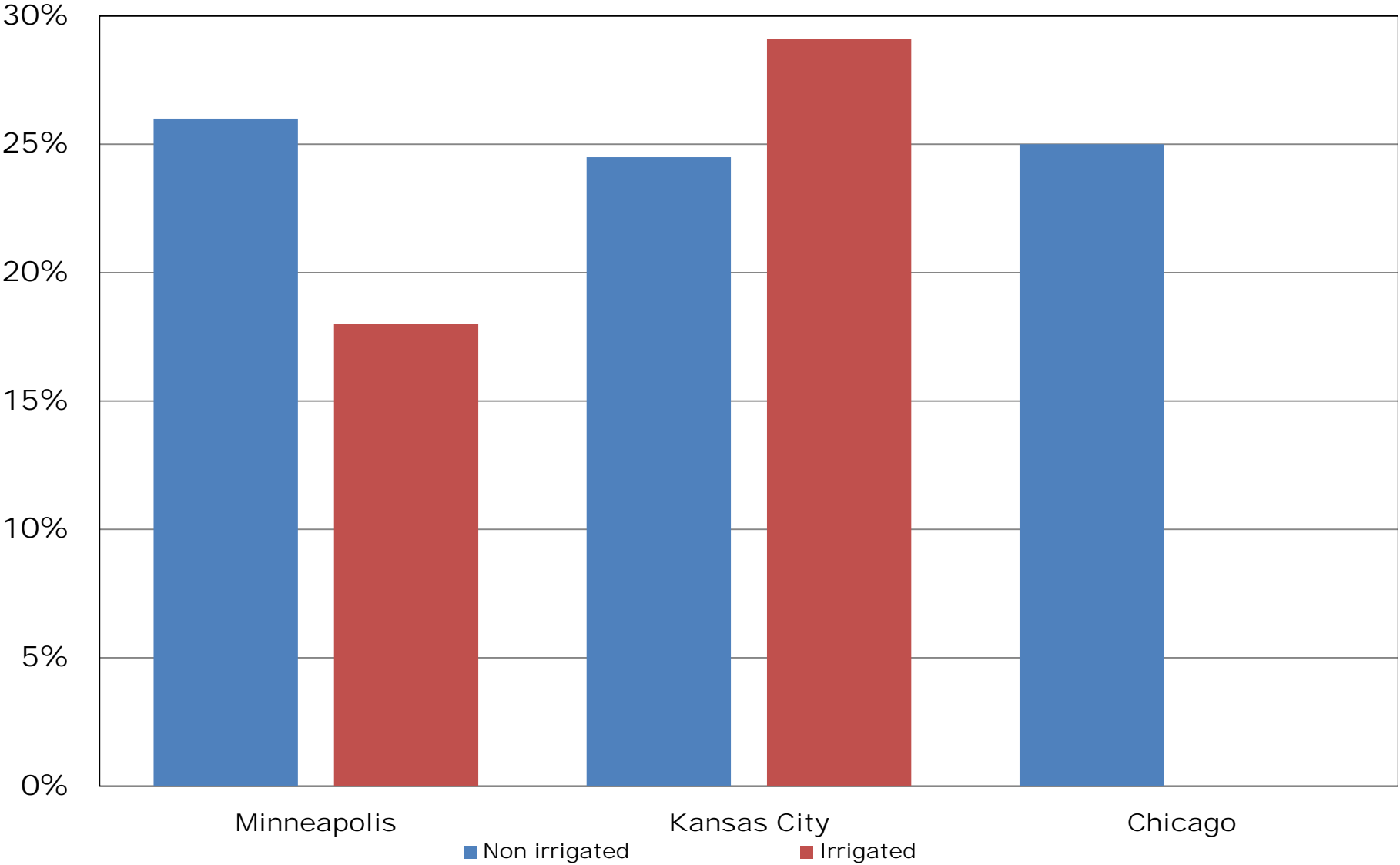


Land Values: A View from the Midwest

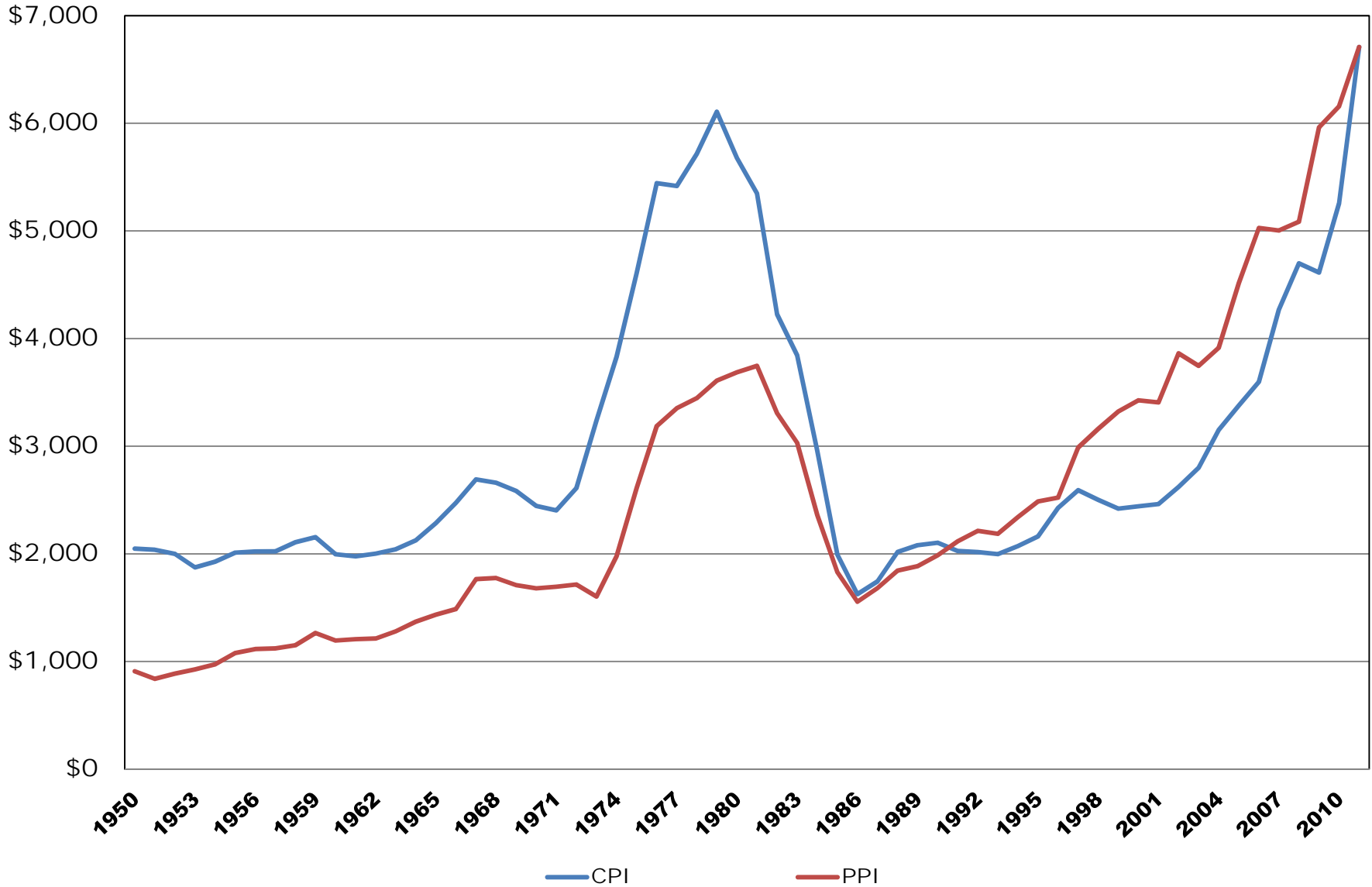
Percent Change in Farmland Values January to January and October to October



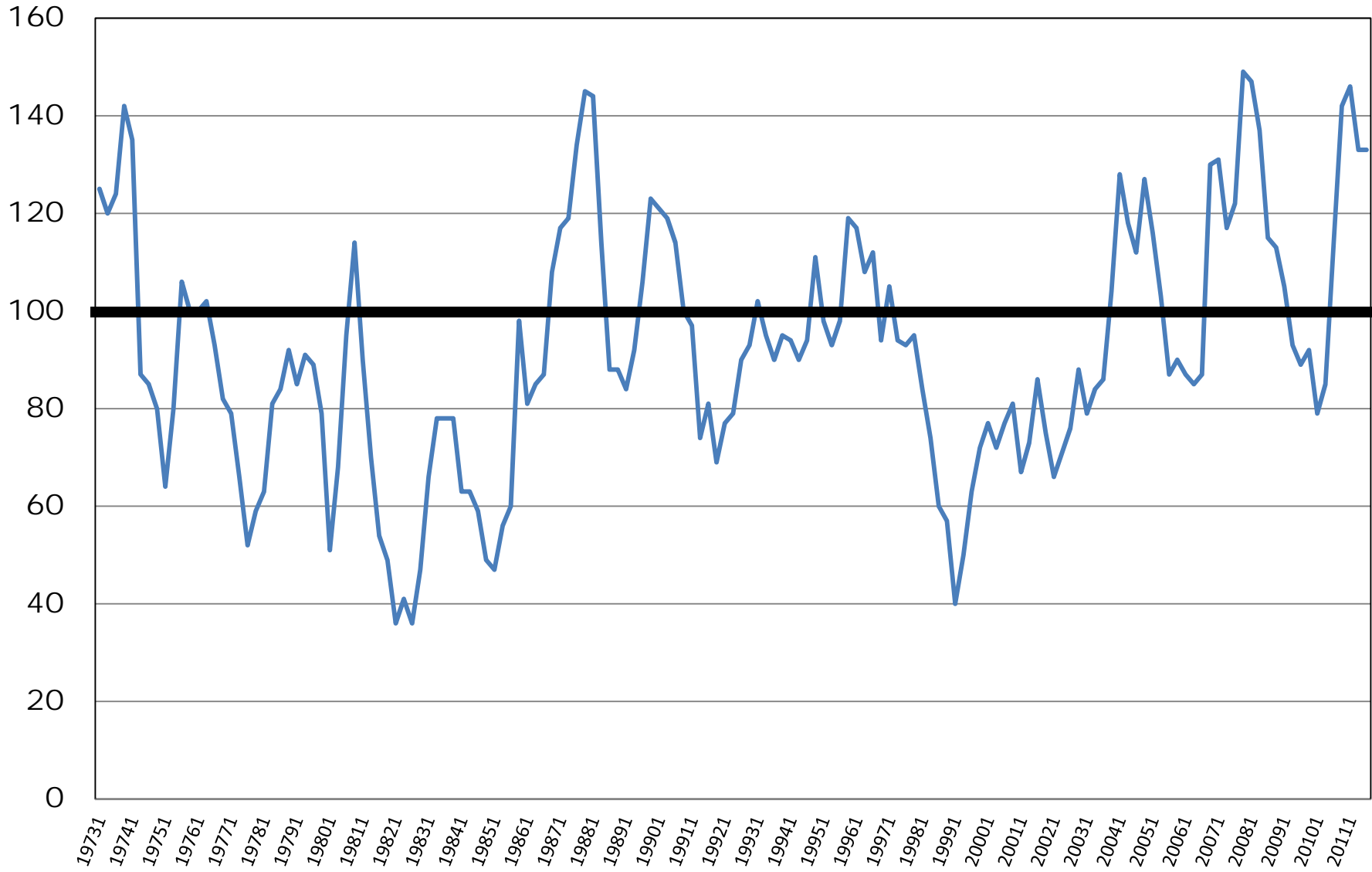
Percent Change in Land Values by Federal Reserve Bank District, October 2010 to October 2011



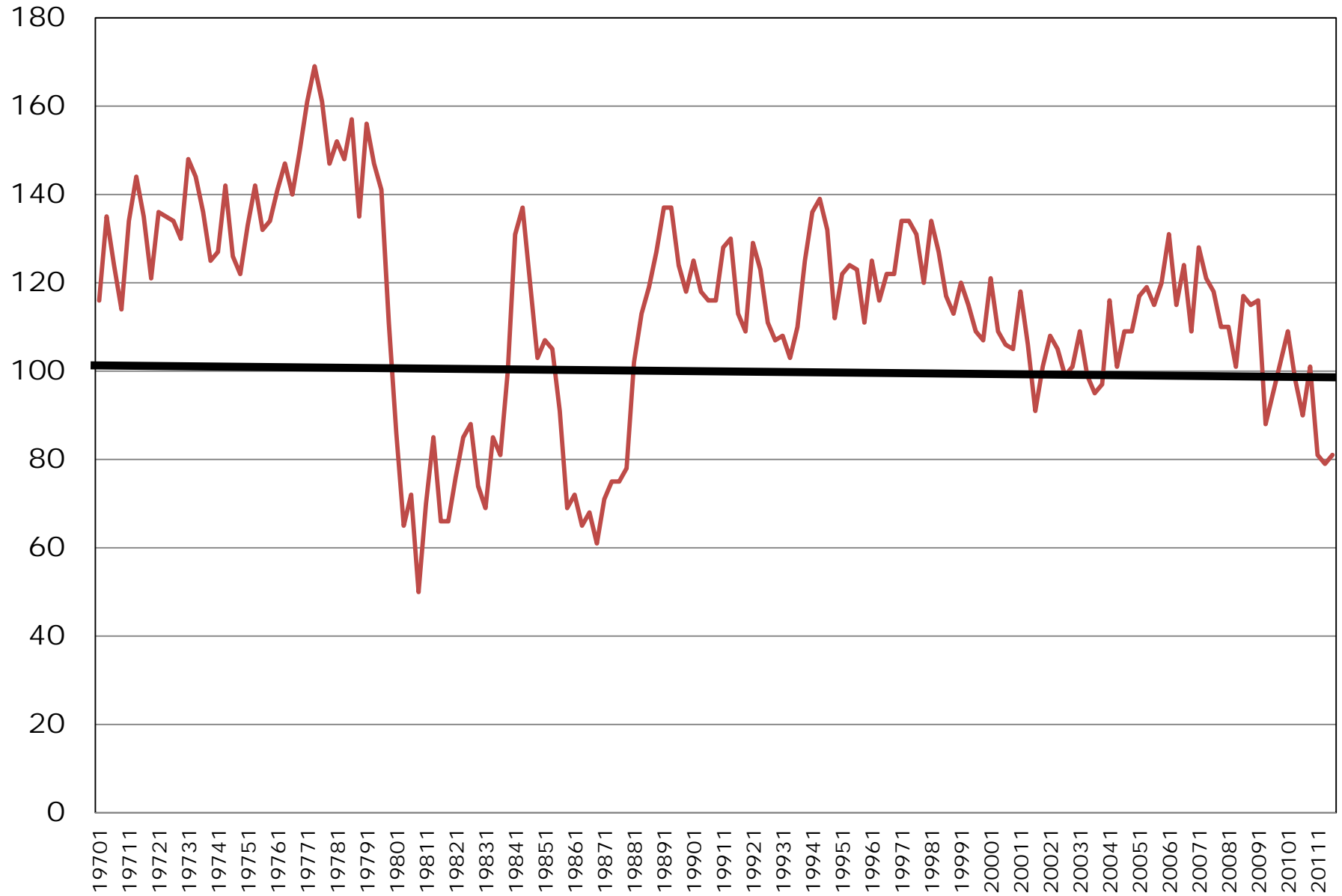
Iowa Land Values Adjusted for Inflation Using Consumer Price Index or Producer Price Index for Farm Products



Loan Repayment Ratio, Federal Reserve Bank of Chicago



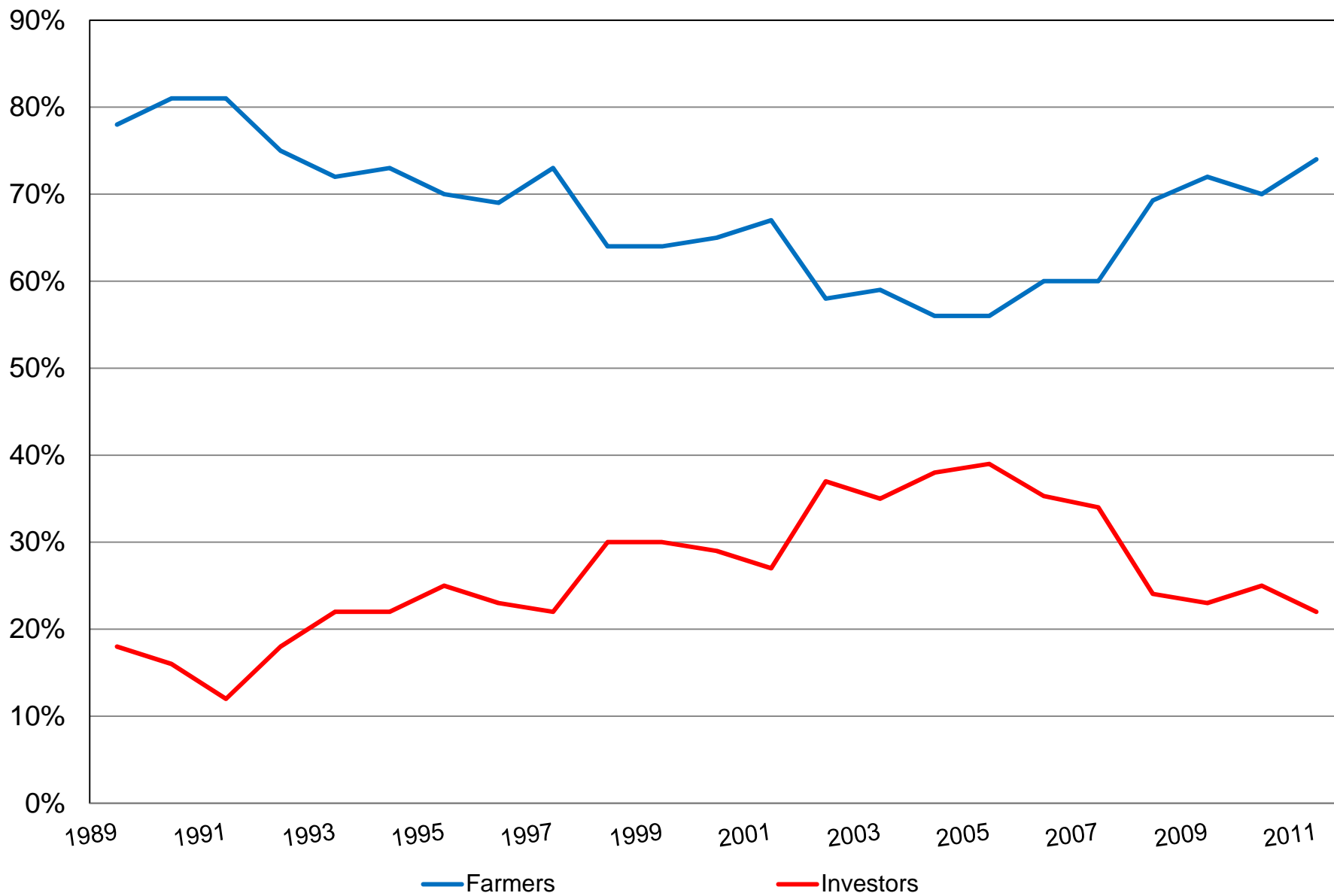
Loan Demand Index; Federal Reserve Bank of Chicago



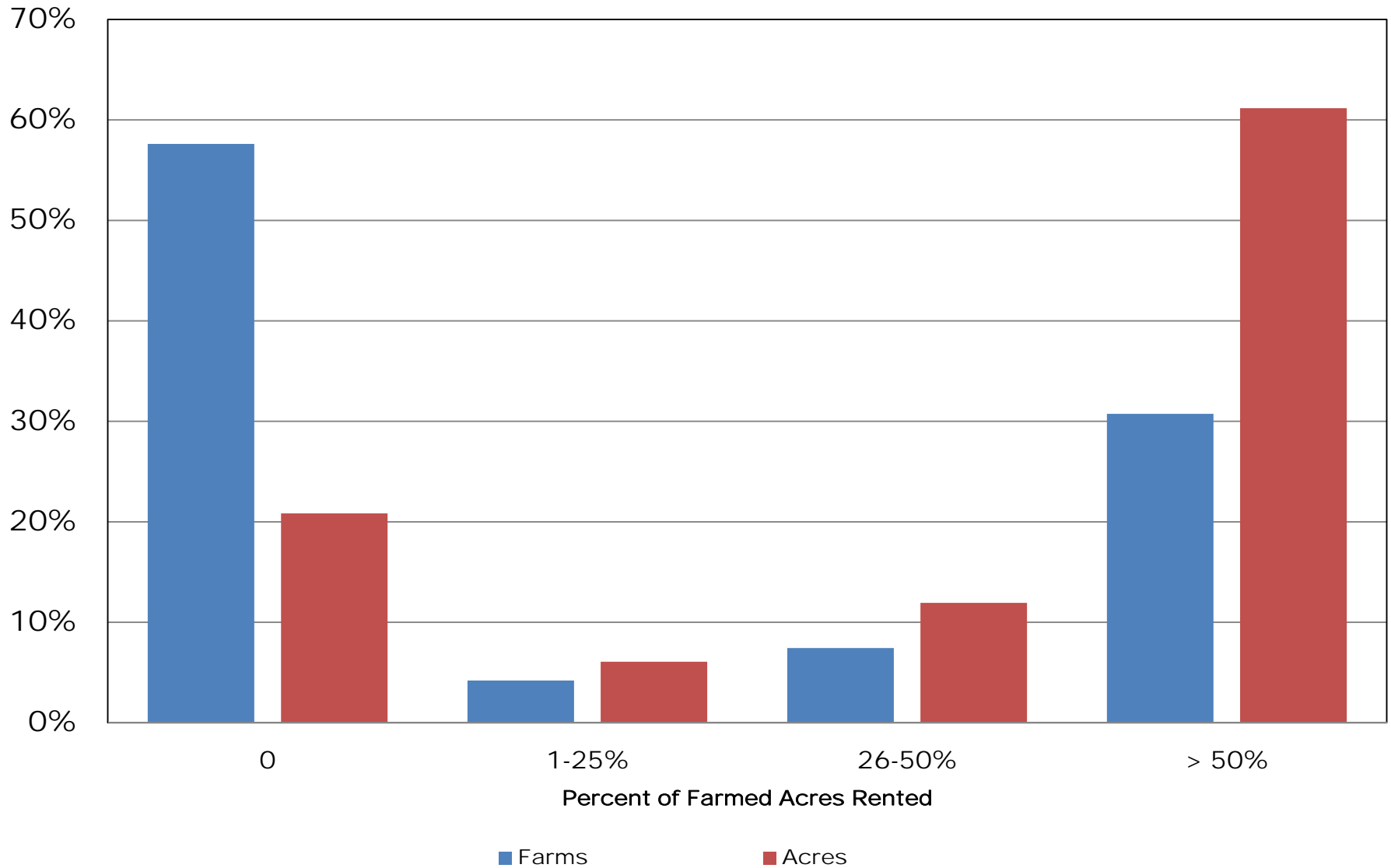


Strong Demand for Land

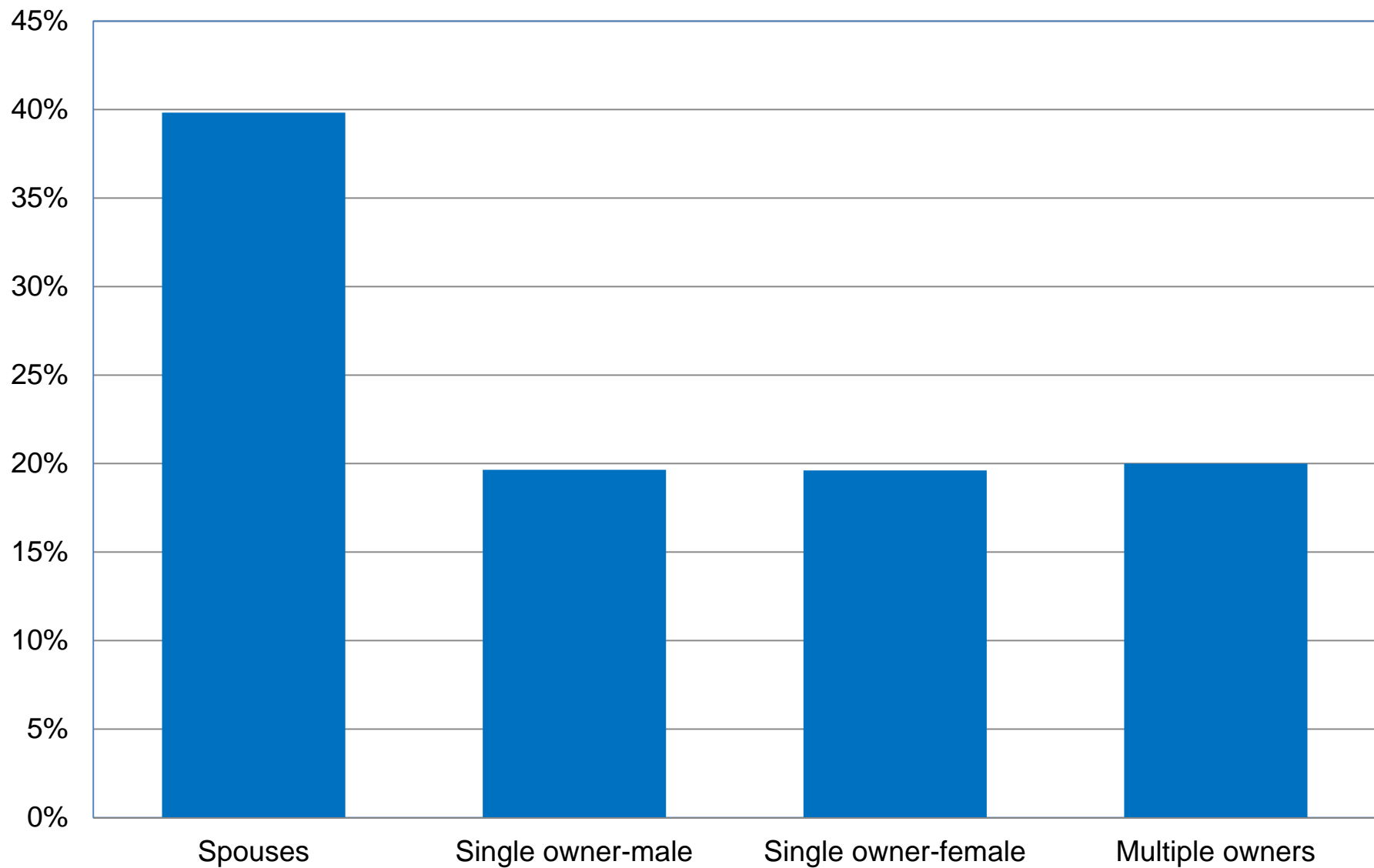
Farm Land Purchasers



Percent of IA Farms and Cropland By Percent of Acres Rented, 2007



Distribution of Iowa Farmland by Gender of Owner



Observations

- Land values are increasing at rates not seen since the early 1970s
- Commodity prices have been the primary force driving the increasing values
- Low interest rates and lack of alternative investments are positive factors
- Relatively good yields
- Impact on beginning farmers
- Possibility for a collapse similar to 1980s is a frequently asked question



Factors to Watch

- Debt levels; not just land debt
- Costs of production
- Commodity prices
- Interest rates
- Economic conditions
- Inertia
- Others

Thank-you

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