

2. Bubble Troubles: Asset Bubbles, Stock Market, Land Values, Interest Rates and Storing Wealth

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Abstract/Summary

Asset bubbles are controversial in the economics profession, but many have been identified in the stock market, housing market and other asset markets. Causes of bubbles are particularly controversial, but markets seem to be vulnerable to the development of bubbles that have had serious consequences for the economy. We will look at asset bubbles, some potential causes, look at the stock market and the land market and discuss land values, farm incomes and interest rates.

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Risk and Profit Topics

- Political Uncertainty
- Economic Uncertainty

Economy has been **turbulent**

- Financial Meltdown (almost)
- Recession
- Housing Market Bubble
- Stock Market
- Commodity Markets
- Gold Market
- Greek debt problems
- Flash Crash

U. S. Economy

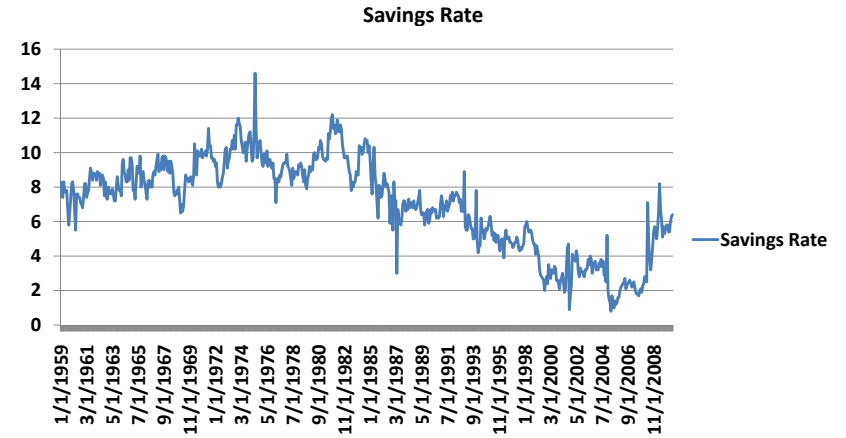
- Low saving rates leading up to the crash—
increased savings since the crash
- Consumer debt is high—now paying it down
- Mortgage Debt
- Government Debt

Consumer Behavior

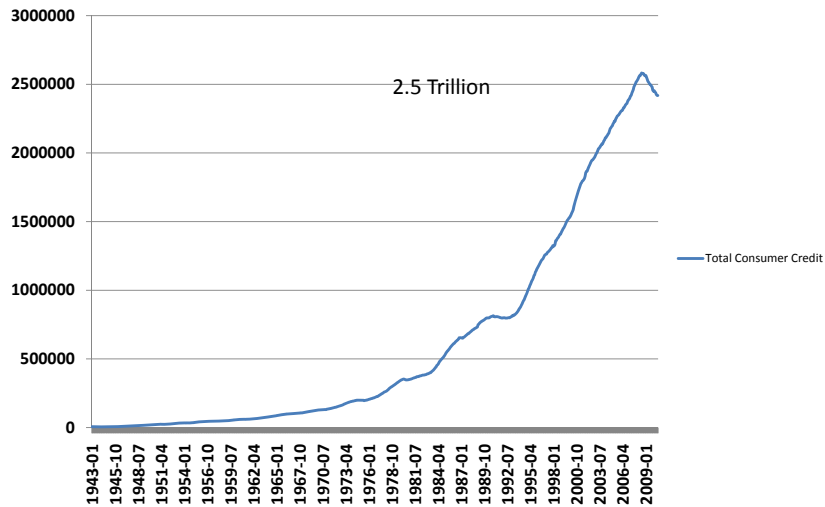
- Really important to the economy
- Consumer confidence is important
- Drives 70% of the economy
- High Unemployment

Personal Savings Rate in US

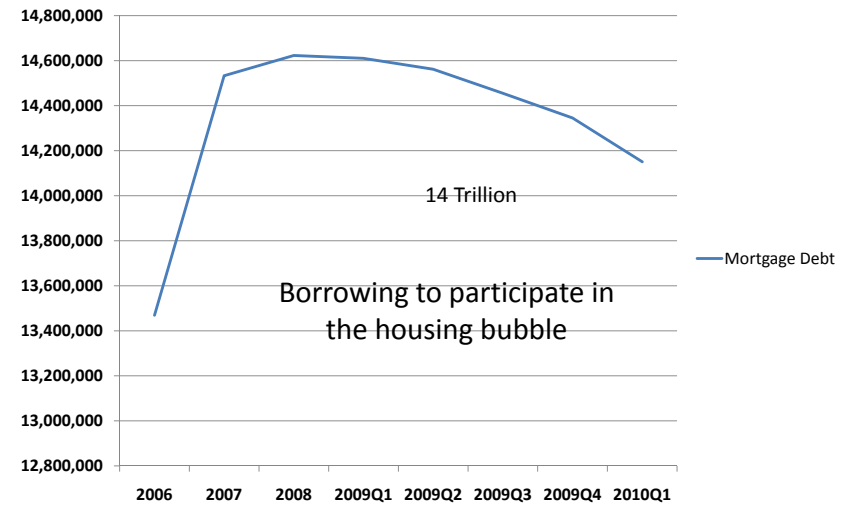
Source: Bureau of Economic Analysis



Total Consumer Credit



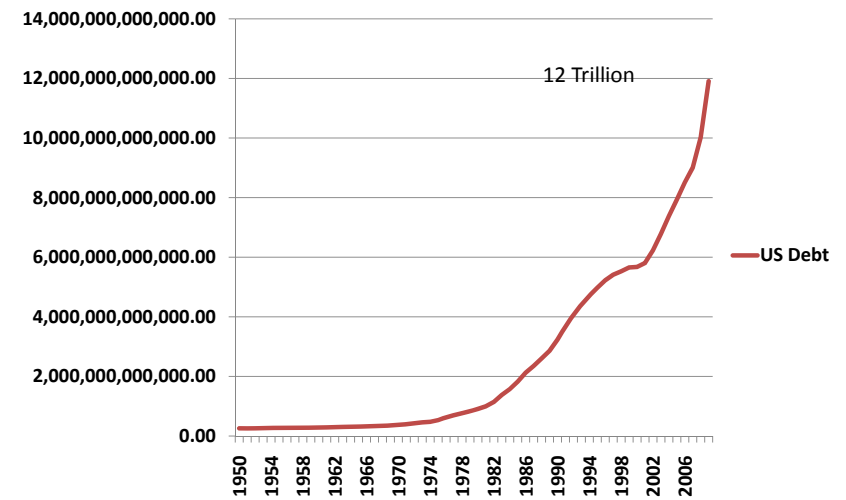
Mortgage Debt



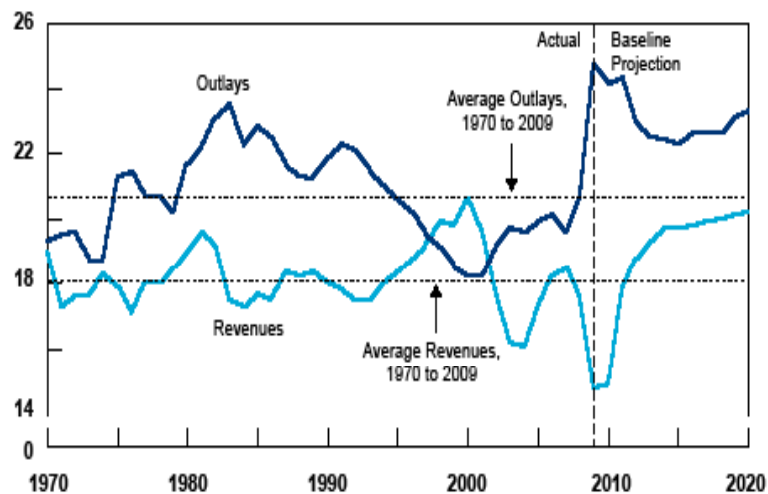
U. S. Economy

- Grew in recent years due to low savings and debt increases
- Is struggling now as consumers save more and reduce debt
- Government debt has increased in effort to keep economy going
- We have to pay for the party, now or later!

Federal Government Debt



Outlays and Revenues



U. S. Economy

- Still Sick!!!!
- Would you shoot it????

More Government or Less Government????

- Answer influenced by how well people believe “the market” works
- Since Ronald Reagan in the 80’s
 - Less government
 - More market oriented
- Major Change with Obama administration

Why the issue is so hot

- Economy about died
- Economy is still in intensive care
- Had a large number of “asset bubbles”
- Asset bubble are indicative of a market that does not always work right

Why the issue is so hot

- Research using brain imaging provides evidence that we are not as rational as economists like to assume

Result of all this

- People are questioning and debating how well markets work and how much regulation should be imposed by government
 - Financial regulation
 - Debate about asset bubbles

Asset Bubbles

- Definition: trade in high volumes at prices that are considerably at variance with intrinsic values—Wikipedia
- Some economists deny that they exist
 - They believe that markets are “rational”

“Efficient Market Hypothesis”

- Some economists believe in the “efficient market hypothesis”
- Simplified-- this means the market is always right

Problem for those who believe in “Efficient Market Hypothesis”

- We have had a lot of bubbles
- They happen in the stock market on average about every 7 years
- Just went through the Dot Com Bubble, and the housing bubble, and many remember the land bubble in the 80’s

Identifying Bubbles

- Hard to identify
- Often conclusively identified only in retrospect—when prices drop radically— after *bubble crash* or *bubble burst*

What Causes Bubbles?

- There is no widely accepted theory to explain why bubbles occur
- But, they do occur under a wide range of conditions
- Occur without uncertainty, speculation or irrational behavior
- Bubbles occur even in highly predictable experimental markets, even with managers and professional traders
 - No uncertainty, and easy to calculate returns

What Causes Bubbles?

- Can occur even if participants are trying to behave rationally
- Can most easily be explained if we include emotions that influence markets

What Causes Bubbles?

- Both boom and bust are due to **positive** feedback mechanism
 - Price gets high and people bid it higher
 - Price gets low and people quit bidding and it gets lower
- Typically stable prices exist under **negative** feedback mechanism
 - Price gets higher-- we buy less
 - Price gets lower-- we buy more

Possible causes of Bubbles

- Excessive liquidity
- Low interest rates
 - Both of the above at the same time!!! Investors leverage their capital and invest in equities and real estate
 - “Too much money chasing too few assets, causing them to appreciate excessively beyond their fundamentals to an unsustainable level”

Possible causes of Bubbles

- Behavioral Factors
 - Greater fool theory
 - Extrapolation—technical analysis
 - Herding
 - Emotions

Why this Housing Bubble Was Different

- We bought this bubble with debt
- Some bubbles are bought with cash
- We have to work down the debt before the economy recovers
 - Imagine the impact of increases in rates
 - Imagine the impact of a deflationary environment

Land Market

- Not liquid
 - Not heavily traded
 - Not homogeneous—each parcel of land is distinct
- Certainly does not move as fast
In theory, dependent on income and interest rates

Land values

- Land Value per Acre*=
$$\frac{\text{Income per Acre}}{\text{Interest Rate}}$$

Income per Acre

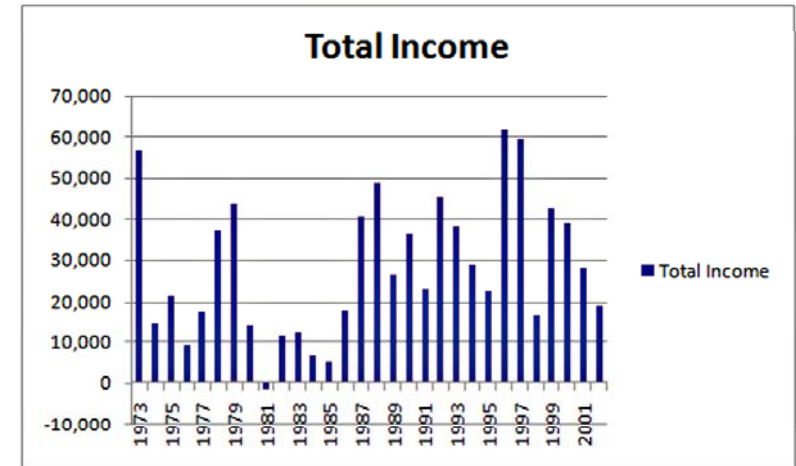
Interest Rate

* This formula gives value from the use of the land.

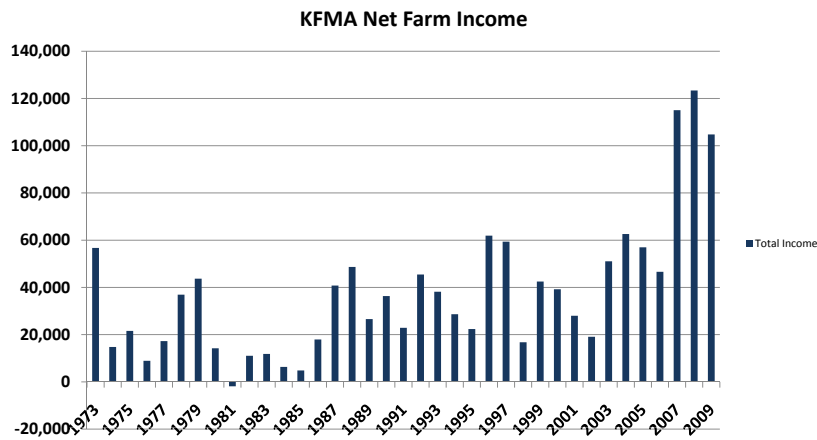
Land Values

- Depend, in theory on income and rates
- Income relationship:
 - Income goes up, land value goes up
 - Income goes down, land value goes down
- Rate relationship:
 - Rates go down, land value goes up
 - Rates go up, land value goes down

KFMA Net Farm Income



KFMA Net Farm Income



Farm Incomes

- “Economic profits” do not last long in a competitive market
- “Economic profits” destroyed by:
 - Increased production—prices fall
 - Increased costs (increase in number of producers)

Farm Incomes

- Does the world have enough extra capacity to destroy economic profits?

Farm Incomes

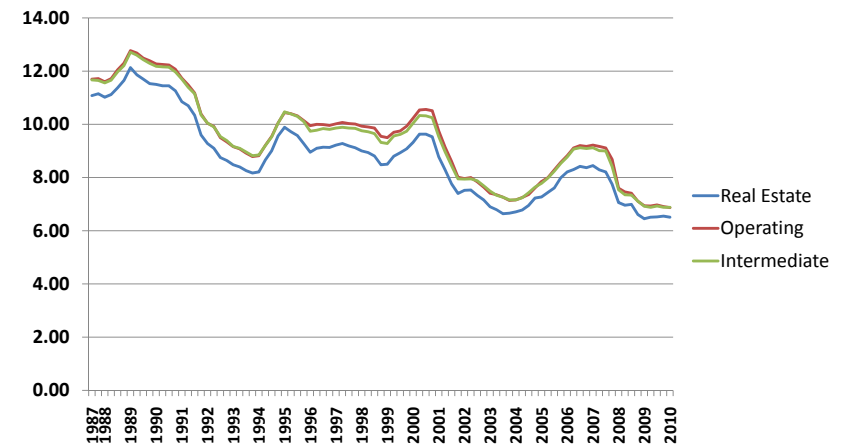
- “Economic profits” do not last long in a competitive market—What about this time????????????????

Historical Farm Income Patterns

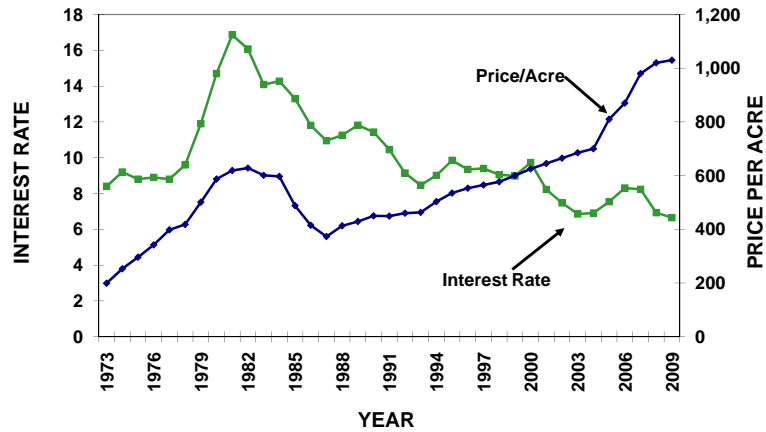
- Before Freedom to farm
 - Excess capacity in U. S. agriculture just waiting for the opportunity
- After Freedom to farm
 - U. S. agriculture became more efficient with less capacity to expand rapidly
 - Ethanol production takes 1/3 of the corn
 - World agriculture may be the “market breaker”

Interest Rates In Kansas

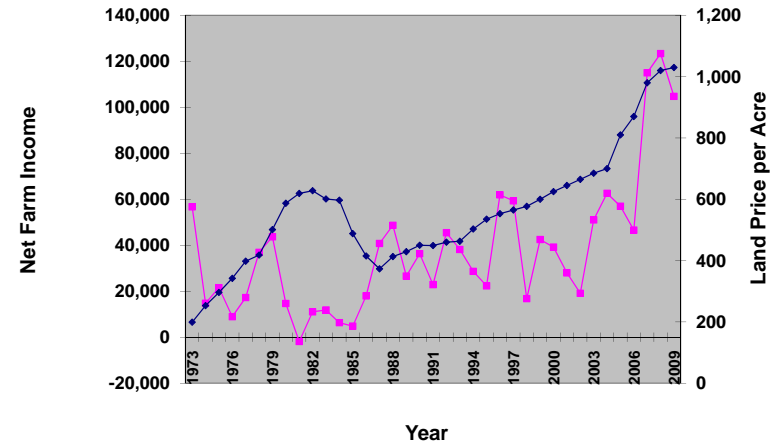
Kansas City Federal Reserve Bank



INTEREST RATES AND KANSAS LAND VALUES



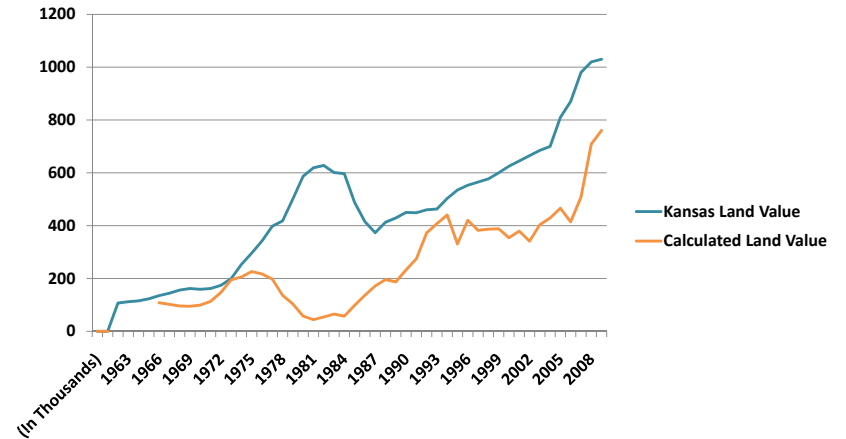
Net Farm Income and Land Prices



Lessons from History

- Markets can do whatever they want
- BUT, the farther they get from the fundamentals, the greater the risk of a correction

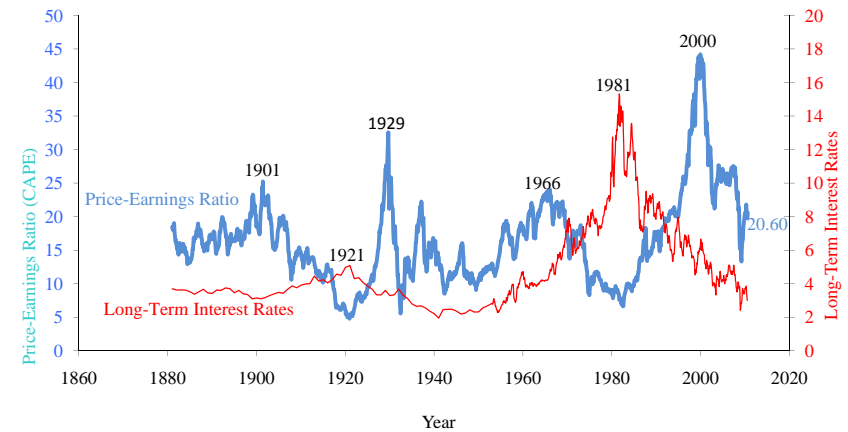
Actual and Calculated Land Values



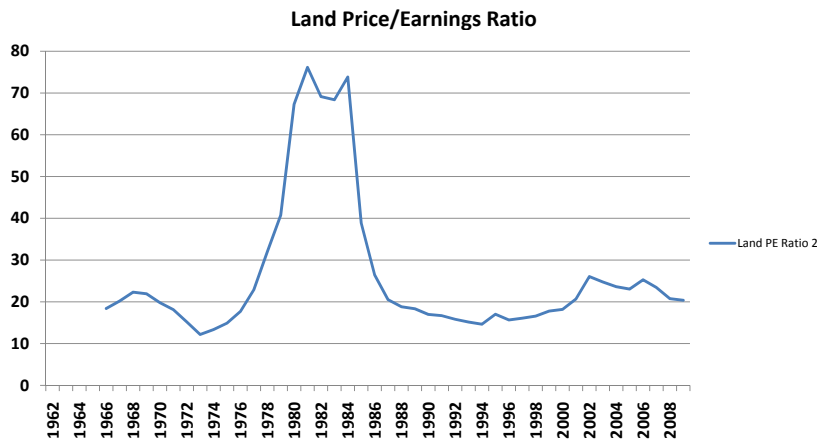
What we learn from the stock market

- PE Ratio= Price per share/ Earnings per share

S and P P/E Ratio and Rates



Land P/E ratio



Summary

- Land values are pretty high, but are **probably** justified at current interest rates and recent farm income levels
- Creation of a land value bubble probably deterred recently by:
 - Crash in the rest of the economy—reduced off farm interest for recreational purposes
 - Increase in credit standards due to financial disaster
 - Great uncertainty in the economy

Summary

- Land prices could be too high if fundamentals change
 - Farm incomes return to longer term averages
 - Interest rates increase

Questions/Comments/Share Your View