

American Farmland Prices: A Bubble?

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American farmland value may be substantially dictated by potential for agricultural production. However, as is the case for most classes of real estate, it is also perceived as a conservative investment that could act as a stable store of value in uncertain economic times. Some investors seek farmland as an investment believed to be a hedge against inflation. Others desire a physical asset that would maintain value in the event that paper (or digital) assets were to become undesirable. There has been a constant pattern of increasing farmland values for more than 30 years. As this pattern has continued regardless of agricultural profitability and varied economic conditions, current American farmland values may constitute a bubble.

INTRODUCTION

In 1987 the average value for an acre of farmland was \$599 (USDA, 2004). By 1999 this had increased by 57% to \$992 per acre (USDA, 2004). In 2019 the average value of an acre of farmland was \$3160 (USDA, 2019). This works out to a 218% increase (1999 to 2019) or a 427% increase (1987 to 2019).

Comparing the aforementioned farmland increases to the CPI for All Urban Consumers (CPI-U) one sees a substantial difference. From January 1999 to January 2019 the CPI-U increased a comparatively modest 53% (BLS, 2019).

The increase in farmland is literally fourfold that of the CPI-U. Could this be indicative of a “bubble” in farmland prices?

Farmland values have ebbed and flowed throughout the history of the United States. After the farm financial crisis of the 1980s values bottomed out in 1987 (USDA, 2004). Farmland values have increased each year from 1987 to 2019 (USDA, 2004).

In grandfather’s day there was an adage “Well, they are not making any new farmland” which was intended to encourage buyers in the face of rising prices. While the adage is true, farmland (like any other asset) is ultimately worth no more than the long run return which can be achieved. It is interesting to note that during the thirty-two year period (1987 to 2019) factors that might be expected to impact farmland prices were somewhat variable. Farm commodity prices fluctuated from year to year. Interest rates ebbed and flowed. The general economy experienced both expansions and recessions. Yet the value of American farmland moved ever higher.

It is this continuous increase in value from 1987 to 2019 that suggests that farmland prices are a bubble. If so, a correction will eventually bring down the price of farmland. In the event that such a correction were both substantial and rapid, the balance sheets of farmers with substantial land ownership would be greatly impacted. As farmland assets serve as collateral for much of the credit extended to farmers, a repeat of the farm financial crisis of the early 1980s could occur.

The farm financial crisis of the 1980s had substantial negative impact, not only on individual farming operations, but also upon rural communities and rural areas. The taxation of farmland is a major source of tax revenues for many school districts, townships, counties and the like. This is especially pronounced in rural areas which have limited non-farmland assets to tax. In the event of declining farmland real estate values, these governmental bodies will endure decreasing tax revenues which, over time, may lead to reductions in various educational services, road maintenance and the like.

What Is a Bubble?

As noted in the Investopedia article entitled:

What is a Bubble?

A bubble is an economic cycle characterized by the rapid escalation of asset prices followed by a contraction. It is created by a surge in asset prices unwarranted by the fundamentals of the asset and driven by exuberant market behavior. When no more investors are willing to buy at the elevated price, a massive sell-off occurs, causing the bubble to deflate.

The Five Steps of a Bubble

Economist Hyman P. Minsky, who was one of the first to explain the development of financial instability and the relationship it has with the economy, identified five stages in a typical credit cycle. The pattern of a bubble is pretty consistent, despite variations in how the cycle is interpreted.

Displacement: This stage takes place when investors start to notice a new paradigm, like a new product or technology, or historically low interest rates — basically anything that gets their attention.

Boom: Prices start to rise at first, then get momentum as more investors enter the market. This sets up the stage for the boom. There is an overall sense of failing to jump in, causing even more people to start buying assets.

Euphoria: When euphoria hits and asset prices skyrocket, caution is thrown out the window.

Profit taking: Figuring out when the bubble will burst isn't easy; once a bubble has burst, it will not inflate again. But anyone who looks at the warning signs will make money by selling off positions.

Panic: Asset prices change course and drop as quickly as they rose. Investors and others want to liquidate them at any price. Asset prices decline as supply outshines demand (Kenton 2019)

Three of the better known bubbles are Tulipomania in Holland during the 1630s, as well as the Dot-Com bubble (1990s) and the Housing bubble (2000s), both in the United States (Kenton, 2019).

Now we can begin to determine whether the increases in farmland prices over a thirty-two year period (1987-2019) may constitute a bubble.

Let us begin by utilizing Minsky's five steps.

Has There Been Displacement?

From January 1987 to October 2019 the effective Federal Funds Rate moved from 6.43% (January 1987) to a peak of 9.85 (hovering near that level for three months), to a trough of less than 0.25% (December 2008 to December 2015) and then up to a rate of 1.83% in October 2019 (FRED, 2019). When compared to such rates being in excess of 19% in the early 1980s and rates over 12% in the 1970s, it is possible that the historically low rates from 1987 to 2019 may have impacted the price of farmland.

Money tends to flow away from investments with low returns to investments with higher returns. Some money is also seeking investments with a low risk of capital losses. With farmland values showing a

constant annual appreciation and other low risk investments (Certificates of Deposit, Treasuries and the like) offering minimal returns, investor interest in farmland ownership may have been fueled. This would be especially true after 2008.

Has There Been a Boom?

The compound rate of appreciation of farmland prices has been 4.65% from 1987 to 2019. From 1999 to 2019 this rate was 3.98%. Compared to the stock market, these rates may seem paltry. Indeed the S & P 500 showed compound rates of return of 7.39% (1987-2019) and 4.42% from 1999 to 2019 (Yahoo, 2019). However, it is possible that farmland ownership is seen as a much less volatile investment than the stock market. Thirty-two consecutive years of annual appreciation would support that viewpoint. While the stock market (as noted by the S & P 500 results) would have certainly yielded greater returns, the lower risk investment in farmland still resulted in a long run return that was fourfold that of inflation (CPI-U) for the period 1987 to 2019.

CONCLUSION

What of the final three stages of bubble creation?

- Have we reached Euphoria?
- Have we reached Profit Taking?
- Have we reached Panic?

At this juncture in time, the farmland price bubble, if it exists, appears to have not entered the final three stages described by Minsky. Only the future may determine whether or not Euphoria and the remaining stages will be recognized and thus prove the existence of the farmland price bubble.

In Illinois both grain prices and net farm income had declined dramatically in recent years. Both corn prices and net farm income have declined by fifty percent (2013-2019), yet Class A farmland remains at a value in excess of \$10,000 (Spangler, 2019).

If farm commodity prices and net farm income continue to decline, the value of farmland of all levels of quality must eventually decline. The seeds for a farmland price decline appear to have been sown.

REFERENCES

- AgriBank: Farmland values moderating.* (2015, November 16). AgriBank. Retrieved November 2, 2019, from <https://www.dairyherd.com/article/agribank-farmland-values-moderating>
- Beachy, D. (2016, April 25). *Farmland Partners closes \$197 million deal for 22,000 acres in Illinois.* AgWeb. Retrieved November 2, 2019, from <https://www.drovers.com/article/farmland-partners-closes-197-million-deal-22000-acres-illinois>
- Beachy, D. (2016, August 17). *Low Commodity Prices Pushing Down Farmland Values.* Ag Web. Retrieved November 2, 2019, from <https://www.agweb.com/article/low-commodity-prices-pushing-down-farmland-values-NAA-debra-beachy>
- Big changes ahead in land ownership and farm operators?* (2019, February 5). Agri Pulse. Retrieved November 2, 2019, from <https://www.agri-pulse.com/articles/11869-big-changes-ahead-in-land-ownership-and-farm-operators>
- Bird, L. (2013, April 6). *\$1.13 million for 80 acres; farmland prices continue to climb.* Globe Gazette. Retrieved November 2, 2019, from https://globegazette.com/news/local/million-for-acres-farmland-prices-continue-to-climb/article_0f4510c6-9f38-11e2-9b70-0019bb2963f4.html
- Bureau of Labor Statistics. (2019). *Consumer Price Index for All Urban Consumers.* Retrieved November 2, 2019, from <https://data.bls.gov/pdq/SurveyOutputServlet>
- Caldwell, J. (2012, October 17). *Per-acre returns key to nailing down cash rent.* Successful Farming. Retrieved October 29, 2019, from https://www.agriculture.com/news/business/peracre-returns-key-to-nailing-down_5-ar26941

- Champaign County Farm Sells For \$15,375 An Acre.* (2013, March 12). Prairie Farmer. Retrieved October 29, 2019, from <https://www.farmprogress.com/story-champaign-county-farm-sells-15375-acre-9-95939>
- Corn plummeting spurs talk of '80s U.S. farmland bust.* (2013, December 21). Daily Journal. Retrieved October 31, 2019, from https://www.daily-journal.com/business/corn-plummeting-spurs-talk-of-s-u-s-farmland-bust/article_0a15b59d-4792-5703-8b06-4e2591ccbc4f.html
- Coulter, P. (2017, March 27). *Illinois farmland prices fall again: Survey.* Illinois Farmer Today. Retrieved November 2, 2019, from https://www.agupdate.com/illinoisfarmertoday/news/state-and-regional/illinois-farmland-prices-fall-again-survey/article_38942e83-c83a-53a1-88bc-369b8878196e.html
- Creswell, J. (2013, March 18). *As Crop Prices Surge, Investment Firms and Farmers Vie for Land.* The New York Times. Retrieved October 29, 2019, from <https://www.nytimes.com/2013/03/19/business/as-crop-prices-surge-investment-firms-and-farmers-vie-for-land.html>
- Dodson, D. (2012, August 29). *Farmland values still strong, but increases slowing, survey says.* The News-Gazette. Retrieved October 24, 2019, from https://www.news-gazette.com/news/farmland-values-still-strong-but-increases-slowing-survey-says/article_ff1d8eeb-b1c5-5b3a-a725-e803c2ea39f9.html
- Dodson, D. (2013, March 13). *Farmland prices hit double-digit increases again.* The News Gazette. Retrieved October 29, 2019, from https://www.news-gazette.com/news/farmland-prices-hit-double-digit-increases-again/article_bec00b25-7c8d-52f9-9789-91ace2f0bb8a.html
- Duffy, M. (2013, October). *Have Iowa farmland values reached the top?* Ag Decision Maker. Retrieved October 31, 2019, from <https://www.extension.iastate.edu/agdm/articles/duffy/DuffyOct13.html>
- Farmland 101: Undergrad buys 80 acres for \$1.13 million.* (2013, April 10). Drovers. Retrieved November 2, 2019, from <https://www.drovers.com/article/farmland-101-undergrad-buys-80-acres-113-million>
- Farmland Price Growth Flattens in South; Outlook Is Stable.* (2013, September 10). Ag Web. Retrieved October 31, 2019, from https://www.agweb.com/article/farmland_price_growth_flattens_in_south_outlook_is_stable
- Farmland Price Plateau Ahead, Bankers Say.* (2013, May 17). Ag Web. Retrieved October 31, 2019, from https://www.agweb.com/article/farmland_price_plateau_ahead_bankers_say
- Farmland prices: Boom or bubble?* (2012, November 15), Drovers Journal. Retrieved October 29, 2019, from <https://www.drovers.com/article/farmland-prices-boom-or-bubble>
- 15 Questions To Ask Before Purchasing Farmland.* (2013, September 10). Michigan Farmer. Retrieved October 31, 2019, from <https://www.farmprogress.com/story-15-questions-ask-before-purchasing-farmland-9-102291>
- FRED. (2019, November 1). *Effective Federal Funds Rate.* Federal Reserve Bank of Saint Louis. Retrieved November 2, 2019 from <https://fred.stlouisfed.org/series/FEDFUNDS>
- Fykeson, J. (2012, August 30). *Farmland price hikes in line with returns, interest rates.* The News-Gazette. Retrieved October 24, 2019, from https://www.agupdate.com/agriview/news/crop/farmland-price-hikes-in-line-with-returns-interest-rates/article_c23447b2-2ee5-5b85-b93f-291fcaeb7115.html
- Geyer, T. (2013, February 16). *Farmland values rise again.* Quad City Times. Retrieved October 29, 2019, from https://qctimes.com/news/local/farmland-values-rise-again/article_74b8445a-78b4-11e2-8208-0019bb2963f4.html
- Grant, D. (2019, November 25). U.S. economy, farmland market in holding pattern. *Farm Week*, 47(47). p.10.
- Hawkins, J. (2012, August 21). *Chicago Fed: Farmland values see limited impact from drought.* FarmWeekNow.com. Retrieved October 24, 2019, from <https://farmweeknow.com/story-chicago-fed-farmland-values-limited-impact-drought-0-62567>
- Hensley, D. (2019, Winter). Farmland Value Update. *Ag Update*, 36(2), 7.

- Hoak, A. (2012, October 29). A Dirty Investment. *Wall Street Journal*. Retrieved October 29, 2019, from <https://www.wsj.com/articles/SB10000872396390444897304578044380306703930>
- Hubbard, R. (2013, May 29). *Ag economists fear bubble forming*. Omaha World-Herald. Retrieved October 31, 2019, from https://www.omaha.com/money/ag-economists-fear-bubble-forming-over-borrowing/article_b009fd57-7f7b-5328-913a-a7fb6a01661c.html
- In Iowa, farmland boom means end of an era for many*. (2011, November 21). Drovers. Retrieved November 2, 2019, from <https://www.drovers.com/article/iowa-farmland-boom-means-end-era-many>
- Iowa Farmland Values Reach \$8,296 Statewide Average*. (2012, December 13). Agweb. Retrieved October 29, 2019, from https://www.agweb.com/article/iowa_farmland_values_reach_8296_statewide_average
- Kenton, W. (2019, June 30). *What is a Bubble?* Investopedia. Retrieved November 2, 2019, from <https://www.investopedia.com/terms/b/bubble.asp>
- Kohl, D. (2013, October 8). *Will the farmland bubble burst?* Farm Futures. Retrieved October 29, 2019, from <https://www.farmprogress.com/blog/will-farmland-bubble-burst>
- Land Values and Cash Rents Falling in Some Areas*. (2019, August 7). American Farm Bureau Federation. Retrieved November 2, 2019, from <https://www.fb.org/market-intel/land-values-and-cash-rents-falling-in-some-areas>
- Nicklay, D. (2012, February 4). *Rented to the Highest Bidder*. Globe Gazette. Retrieved October 24, 2019, from https://globegazette.com/news/local/rented-to-the-highest-bidder/article_eba13984-4faf-11e1-a6c3-0019bb2963f4.html
- Nixon, R., & Eligon, J. (2012, October 23). *Price of the land is growing bigger down on the farm*. The New York Times. Retrieved October 29, 2019, from <https://www.heraldtribune.com/news/20121023/price-of-the-land-is-growing-bigger-down-on-the-farm>
- O'Leary, F. (2016, April 6). *State farmland rental rates are competitive*. Wisconsin Agriculturist. Retrieved November 2, 2019, from <https://www.farmprogress.com/story-state-farmland-rental-rates-are-competitive-9-139719>
- Schafer, S. (2019, Mid-November). Farmland Price Outlook. *Farm Journal*.
- Shafer, S. (2013, May 17). *Sell Land to Build Up Savings?* Ag Web. Retrieved October 31, 2019, from https://www.agweb.com/article/sell_land_to_build_up_savings
- Shafer, S. (2013, November 21). *3 Reasons Farmland Values Could Head South*. Ag Web. Retrieved October 31, 2019, from https://www.agweb.com/article/3_reasons_farmland_values_could_head_south_NAA_Sara_Schafer
- Spangler, H. (2019, November). Why Aren't Land Values in the Tank. *Prairie Farmer*, 191(11), pp 3-7.
- Stewart, P. (2019, January 21). *Our Incredible Vanishing Farmland*. Drovers. Retrieved November 2, 2019, from <https://www.drovers.com/article/our-incredible-vanishing-farmland>
- Swoboda, R. (2012, October 29). *Iowa Farmland Sale Sets New Record At \$21,900 Per Acre*. Wallaces Farmer. Retrieved October 29, 2019, from <https://www.farmprogress.com/story-iowa-farmland-sale-sets-new-record-21900-per-acre-9-64459>
- United States Department of Agriculture. National Agricultural Statistics Service. (2004). *Agricultural Land Values and Cash Rents Final Estimates 1999-2003*. Retrieved November 2, 2019, from https://downloads.usda.library.cornell.edu/usdaesmis/files/5425k968s/wh246v856/4x51hn20n/aglndvalcashrent_Agricultural_Land_Values_and_Cash_Rents_-_Final_Estimates__1999-2003.pdf
- United States Department of Agriculture. National Agricultural Statistics Service. (2019). *Land Values 2019 Summary*. Retrieved November 2, 2019, from <https://downloads.usda.library.cornell.edu/usdaesmis/files/pn89d6567/g732dn07g/9306t9701/land0819.pdf>
- United States Department of Agriculture. National Agricultural Statistics Service. (2004). *Agricultural Land Values and Cash Rents Final Estimates 1999-2003*. Retrieved November 2, 2019, from

- https://downloads.usda.library.cornell.edu/usda-esmis/files/5425k968s/wh246v856/4x51hn20n/aglndvalcashrent_Agricultural_Land_Values_and_Cash_Rents_-_Final_Estimates__1999-2003.pdf
- Wallace, J. (2017, August 24). *Rural Surveyors Call for More Brexit Clarity*. WSJ City. Retrieved November 2, 2019, from <https://city.wsj.com/articles/95143930-5832-4743-b8ab-c2964aee5639>
- Watts, W. (2013, October 21). *Farmland bubble? 10-year rise raises red flags*. Market Watch. Retrieved October 29, 2019, from <https://www.marketwatch.com/story/farmland-bubble-10-year-rise-raises-red-flags-2013-10-21>
- Yahoo. (2019, November 2). *S&P 500 Chart*. Retrieved November 2, 2019, from https://www.google.com/search?q=s+and+p+500+historical+graph&rlz=1C1GCEB_enUS836US836&oq=S+&aqs=chrome.69i59j69i6015.3999j0j7&sourceid=chrome&ie=UTF-8
- Zulauf, C., & Rettig, N. (2013, April 8). *Comparing Farm Cash Income and Real Estate: Now vs. 1970*. Farm Futures. Retrieved October 29, 2019, from <https://www.farmprogress.com/story-comparing-farm-cash-income-real-estate-vs-1970-17-96942>