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.

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