

RECESSION LESSON:

*Double, double toil and trouble,
watch out for the asset bubble*



DEFINITION:

Asset bubbles are formed when market prices rise above fundamental income streams used for their capitalized values. These bubbles generally develop in an extended period of overvaluation and can occur in real estate, the stock market, and with commodities and precious metals. Bubbles form when speculators focus on the resale value of an asset, instead of looking at its actual value. In a bubble, it doesn't matter that a price is artificially high - it only matters that it can be sold for an even more irrational price at a later date. (www.investorglossary.com)



Explanation of asset bubbles

"Double, double, toil and trouble, fire burn and cauldron bubble..." chanted the witches in Shakespeare's *Macbeth* as they cast spells on the evil king. Since *Macbeth* later met his demise in the play, could bubbles be a foreshadowing of ruin? In the case of asset bubbles, the answer is often yes. The magnitude of destruction, however, depends on how many people or firms are involved.

Before diving completely into a discussion of asset bubbles, first consider the similar but slightly easier to understand concept of price bubbles. Price bubbles happen all the time. They occur when the value of a product inflates, often due to limited supply. One example of price bubbles can be observed each holiday season when the hottest toy around is also the most

scarce and people pay much more than the toy is worth in order to have it in time. The value of the toy may become elevated, but most of the time, once demand falls off, the bubble deflates and prices return to their pre-craze level. While people who purchased the toy at the increased price might be annoyed by the situation, this type of bubble doesn't really cause much harm. The same is ultimately true of any asset bubble contained to someone paying for an overvalued item with their own money or equity.

Asset bubbles also include the increased price of a product. The increased price of the product is based on expectations of future value (remember that for the next section on the role of asset bubbles in the recent recession). The income generated from the asset (such as rent received from owning a duplex) can also play a role in asset bubbles, but this lesson focuses on the income used to purchase the asset.

So asset bubbles occur when the value of a product increases based on expectations of future value, but the income used to purchase that product does not. The damage with asset bubbles occurs when someone receives financing to purchase an over-valued asset. Suddenly, when the item loses its value it's not just the owner who is affected but also whatever institution or institutions loaned them the money to make the purchase. The owner bought the asset for more money than it was actually worth, and once the bubble bursts they most likely owe more on the loan than the current value of the asset. This is called being "upside down in a loan."

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Role of asset bubbles during the recent recession

Continued

Additionally, the owner's income did not increase to support the overpriced purchase. In these cases, the purchaser is often betting on the future value of the item to justify the initial purchase. Sometimes the gamble pays off; other times the purchaser, and everyone involved, ends up with the sticky mess of a popped bubble. Without that anticipated increased equity and lack of increased income there may be more difficulty making payments, which cause the effects of the burst bubble to spill over to the lender.

Complicating matters is the fact that asset bubbles are often hard to detect before they become a problem. Maybe income streams are rising along with the value of an asset. Everything should be in balance, but another contributing factor can be interest rates. Lower interest rates lower the cost to borrow money and could sway purchasers into buying assets at a higher price than what they could normally afford. Think of the effects of zero percent financing on someone looking to purchase a car. The individual might decide to buy a larger car or get extra features as a result of the financing offer. Because of the interest rate alone, the asset value is no longer in line with income (the car costs more than the individual would normally look to spend). It's hard to disentangle the effects of interest rates from the mix, which makes it hard to see bubbles.

Recall that in the Macbeth analogy, bubbles are the foreshadowing of ruin. Keeping this in mind when considering the recent recession, it's not terribly tricky to work out the role of the housing sector bubble. In 2005-2006, unemployment was low, economic growth and confidence continued to increase and credit was very easy to obtain. Plus, many people were extremely confident in the expectation that home prices would continue to rise. In some cases, receiving a loan to purchase a home did not even require proof of income or employment, and 100 percent financing, meaning no down payment on the purchase, was common. Interest rates remained low, which had the exact effect discussed above - consumers were more likely to take on extra debt due to the low cost to borrow money. In addition to many people purchasing homes more expensive than they could afford, the practice of flipping homes (purchasing a home, completing a quick remodel and selling it) for a quick investment became relatively common in many parts of the country.



The supply of new housing could not keep up with the excessive demand, and prices started to rise as a result. Homes became overvalued, and many people strongly believed that prices would never fall. The artificially high values, and the idea that they would continue to rise, supported the lending practices discussed about here. However, incomes were not rising alongside the value of homes, so loan payments were not supported for the long term. Many sub-prime loans were adjustable rate mortgages (ARMs). As the mortgage rates adjusted higher, more and more consumers found they were unable to make payments. Home foreclosures became common, and home values began to decline as demand disappeared.

Lessons learned about asset bubbles

The recent recession provides some important lessons about asset bubbles:

- *If asset values are rising, but fundamental income streams are not, assets become overpriced.* The value of the asset should be based on the income it generates or the income used to pay for it.
- *Inflation of asset values is generally followed by a decline in these values.* In other words, the adage “what goes up must come down” is true.
- *Too much leverage can lead to too much over-extension, or consumers financially committing to repay too much, which is harmful to both the consumer and the bank lending the money.* Remember, asset bubbles are contained if a purchaser uses their own money or equity, but if the purchaser uses a loan from a bank, the effects of the asset bubble spill over to the bank that provided the loan as well.



Historical example of asset bubbles: 1980s farm crisis

The housing crisis described here was not as severe throughout many areas of the Midwest. One reason for this could be that much of this region had already learned their lesson about asset bubbles 30 years prior.

Farm incomes and commodity prices boomed during the 1970s due to lower trade barriers and a sharp rise in agricultural exports. A weak dollar made U.S. goods cheaper for global markets, and exports rose over 500 percent from 1972 to 1981. Net farm income rose as a result, rising 41 percent over the decade. As a result, farmers looked to expand their crop acres. Low interest rates and eased agricultural lending restrictions further enticed farmland purchases. Believing that commodity prices and land values would continue to rise, many farmers went deeply into debt, and many lenders underwrote loans using only the continued appreciation of farmlands as collateral.

Farmland values did rise...for a while. Farmland values peaked in 1981 in the Midwest, but faced declines as much as 49 percent over the next six years, bottoming

out in 1987. A global recession in the early 1980s led to tight money and high interest rates imposed by the Federal Reserve to combat inflation. As global demand dropped off, so did farmland values. Many farmers found it impossible to pay down their debts as fast as their asset values declined, especially as cash flow decreased and interest rates rose. Many farmers were underwater in their loans and faced foreclosure. Since the debt was leveraged, the farm crisis spilled over to banks. One third of all bank failures from 1984 to 1987 were agricultural banks. See the chart on cropland values on the following page to see how long it took for farmland values to recover.

For More Information

Fitzpatrick, Thomas, J., IV, and James B. Thomson. “Stripdowns and Bankruptcy: Lessons from Agricultural Bankruptcy Reform.” Federal Reserve Bank of Cleveland, Economic Commentary, 3 Aug. 2010.

<http://www.clevelandfed.org/research/commentary/2010/2010-9.cfm>

Henderson, Jason. “Will Farmland Values Keep Booming?” Federal Reserve Bank of Kansas City, Economic Review, Second Quarter 2008, 81-104.

<http://www.kansascityfed.org/PUBLICAT/ECONREV/PDF/2q08henderson.pdf>



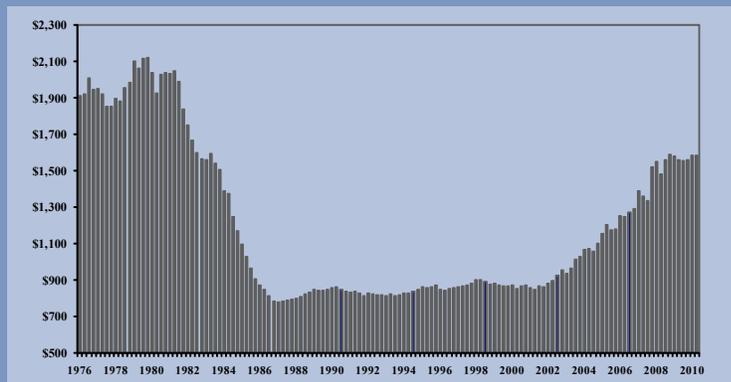
PICTURING ASSET BUBBLES

The following charts help show what asset bubbles look like.

Average Nonirrigated Cropland Values

Tenth Federal Reserve District

Dollars/acre (2010 constant dollar)



While this chart does not show the creation of the farmland value asset bubble of the late 1970s, it clearly depicts what can happen once a bubble bursts. Notice the steep decline in farmland values in the early 1980s. After a decade and a half of recovery, farmland values began to rise again in the early 2000s.



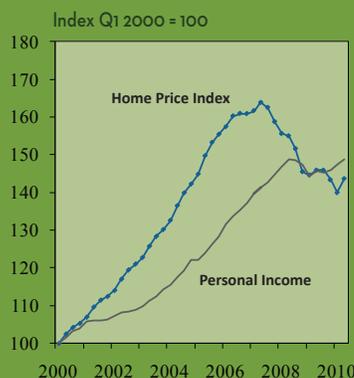
Remember that asset bubbles occur when the value of a product increases, but the income used to purchase that product does not. Use that definition to consider the two graphs to the right.

The left graph shows the recent U.S. housing bubble. In the early- to mid-2000s, the gap between home prices and personal incomes widened, with growth in home prices outpacing personal income growth. In other words, home prices (the product) increased at a much faster rate than personal income (the income used to purchase the product). The result was an asset bubble that eventually burst and spilled over to the financial institutions that provided the mortgages for overextended consumers.

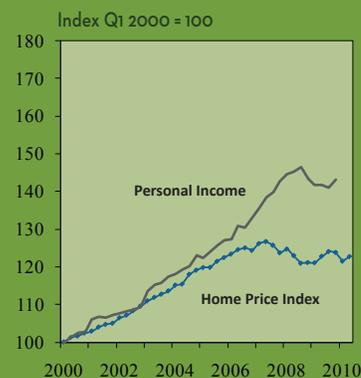
The housing bubble didn't happen everywhere, though. The chart on the right shows home prices and personal income growth for Nebraska. Notice that home prices stayed closely aligned with income, with income always at least slightly higher than the home price index. In Nebraska, and many similar Midwestern states, the growth in home prices did not exceed the growth in income used to purchase those homes.

Home Price and Income Growth

U.S. Home Price and Personal Income Growth



Nebraska Home Price and Personal Income Growth



Source: Bureau of Economic Analysis and Federal Housing Finance Agency



RECESSION LESSON LEARNED: ASSET BUBBLES

Activity 1

Review the fact that asset bubbles can develop with commodities (goods) of value when speculators anticipate the resale price of the commodity will increase. Sometimes the commodity is quite unique or rare, as in the case of the tulip bulb craze in Holland during the 1600s. Ask students to research “tulipmania” online at: <http://www.pfadvice.com/2006/04/22/investing-mania-lessons-of-the-tulip-bulb/> or print copies of the article for students to read. Discuss the following questions to better understand this unusual bubble:

- Why did tulips become so popular in Holland?
- What was the price of a single tulip bulb at the height of the mania?
- What precipitated the decrease in demand for the bulbs?
- How did the Dutch government become involved in the process?
- What does the author suggest as a reason for so many people to become involved in the craze?
- What characteristics of the tulip bubble are similar to those of the housing bubble?

Activity 2

Introduce the psychology behind asset bubble formation, or the behavioral components that lead to a speculative bubble, using Beanie Babies as the asset example.

- *Euphoric public sentiment about the asset class* - Ty Beanie Babies were cute, unique collectibles in a variety of animal designs that were initially reasonably priced and loved by all age groups.
- *Manic speculative investment activity* - Consumers purchased Beanie Babies en masse, believing their investments would increase in value due to the popularity of the toy. Ty assisted the craze by retiring certain designs and creating “special edition” Beanies that were often hard to find, due to limited production.
- *Rapidly rising prices* - Beanie Babies that originally sold for approximately \$5 each soon sold for five to ten times their price, with the most sought-after Beanies selling for hundreds of dollars. A few limited edition Beanies were priced in the thousands of dollars.

Challenge students to create the next toy, game or collectible that might cause an asset bubble due to its overwhelming popularity. After designing their creation, ask students to write a marketing plan describing the following: the name and price of their product; how they would develop its popularity with the public; and what strategies they would use to create demand and add value to their product. Have students share their completed designs and plans with the class and discuss which products might be most successful and why.

