

## Stock Market Perspective: Bubbles, How Revealing?

No, I am not going to discuss exotic dancers. No doubt you have read or heard some pundit saying house prices, at least in some locales, are now in a “bubble,” and that is all too reminiscent of the bubble in (high technology) stocks that burst in 2000. It seems that they want you to fear that the value of your house is going to drop 35% to 75% in the next couple of years. The interesting questions are what it means to label something as a bubble and what, if anything, does it tell us about what to expect.

I am going to take a different look at how the stocks did during the bubble that burst a couple of years ago and see what, if any, insights we may be able to gain about house prices in the next few years. I don't claim any particular expertise about house prices, so my discussion of them will not be as detailed as that about stock prices.

► **What makes a bubble?** There have been several widely discussed ones over the past few hundred years. The first that I am aware of is Dutch tulip bulbs in the 17<sup>th</sup> Century. At one point, they were considered more valuable than gold, and supposedly the bubble began to burst when someone not aware of what they were mistook the bowl of them proudly displayed on his host's table for something edible and took a bite out of one. The story may well be apocryphal. Another famous one was the British South Seas Company in the early 1700s.

What characterizes a financial bubble is that too many speculators are willing to pay for an enormous future value of an instrument that is totally out-of-line with its actual, perhaps not precisely known, current value. At the tail end of the great high technology bull market ending in 2000 that was dramatically illustrated by some initial public offerings (IPOs) of companies that literally had yet to take in their

first dollar of revenue. Some of these had very nebulous business plans that promised to do great things, but with few verifiable details. That such an IPO could attract any buyers at all illustrates the bubble creating mentality. These stocks quickly reverted to their true value, virtually zero, once the bubble burst.

► **Stock Market “Bubble”:** Most who call it that point out that the S&P 500 Index fell by about 45% from its peak to its low point in October 2002, and the Nasdaq Composite fell by over 80%, a truly breathtaking amount. Were things really that bad? I'll look beyond the averages to get a different perspective.

There were some stocks, some of well established firms, that fell by well over half, and a few, such as Lucent, lost almost their entire value. However, as we shall see, most stocks did not fare nearly as poorly as the averages.

I will look at the 2000-02 period, which was a three year period that contained the bubble bursting. Over the three-year period, the S&P 500 with dividends included fell by over 37%. Based on that figure, one would naturally think that the typical stock in that index was a very bad investment for those three years.

That is hardly the case. I have 2000-02 data for 457 of the current members of the S&P 500 Index.<sup>1</sup> Almost half of them, 210, had positive total returns, which includes dividends, over the period, while 247 lost ground over the three years. It is true that 12 of those stocks lost over 90% of their value, but 25 more than doubled. The average change of 457 stocks was a very

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<sup>1</sup> That list includes some stocks that were not in the index at all or for the whole 2000-02 period and does not have some of the stocks that were in the index for the whole period but are no longer in it. I do not think those problems would significantly change the results shown.

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*How badly did the typical stock fare during the “bubble” that burst in 2000-02? Not nearly as poorly as you might think.*

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small gain of 0.11%. The average is pulled up since a stock can't drop by more than 100% (and if it fell by that much, it would not be on the list of 457), but can certainly gain more than that amount. The median change was a loss of 5.6%, which is a far cry from over 37% drop of the index. I think it is fair to say that the "typical" S&P stock was little changed over the 2000-02 period.

What about the high techs? After all, most who talk about the bubble in stocks are really referring to the go-go technology issues. The Nasdaq Composite has far too many stocks and a membership that changes frequently to make it practical to do the same type of analysis for it. Instead, I will look at the Nasdaq 100 (ticker NDX) which consists of that number of the largest non-financial stocks not listed on an exchange. The NDX fell by over 73% during the three years, which sounds as if the typical member of the index was almost wiped out.

I have data for 89 of the current NDX members for 2000-02. Of those 32, or 36%, gained. The average change was a drop of 7.4%, but the median was a loss of 36.5% over the three years. It is hard to classify the typical behavior of the NDX stocks, most of which are in technology sectors. It was clearly down, perhaps by quite a bit, but it was not at all close to losing even half of its value or the nearly three-quarters drop of the index.

► **Why did the typical stock not fall nearly as much as the indices?** The answer lies in the way the indices are computed. They are "capitalization weighted."<sup>2</sup> That means the larger stocks in terms of their market values have a much greater influence on the index than the smaller ones. Among the stocks with larger capitalizations are going to be some with bubble-like behavior. After all, if its price is

<sup>2</sup> That is not true for the Dow Jones Industrial Average, which is price weighted.

going to be pushed up way "too high," so will its market capitalization. Among the larger cap stocks at the beginning of 2000 that fell quite a bit are Qualcomm, down almost 80% over the three years, Cisco, which dropped by about 75%, Intel, down almost 62%, and Microsoft, which was the largest capitalization stock at the peak, lost over 55%. Those stocks are in both the S&P and NDX. There were also large NYSE-traded stocks that took big hits over the period. In addition to Intel and Microsoft, several Dow stocks lost over half their value in the three years: GE, Honeywell, McDonalds, Hewlett-Packard, Home Depot, and AT&T.

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*People need to live somewhere, so houses have considerable current value. Hardly the stuff that makes "bubbles."*

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I believe that the broad brush approach of saying there was a bubble in stocks that burst with a crash is

misleading. Quite a few companies had a lot of real value, even if it hard to pin down and easy to overestimate, so there was and is little chance that they will be wiped out as was the case with tulip bulbs and the South Sea Company where there was virtually no real value. Some stocks with little real value or business that suffered extreme setbacks were almost or completely wiped out. However, the typical stock was not, and a reasonably diversified portfolio with appropriate risk control methods most likely did not suffer too much damage. Those who were convinced that technology issues could only go up—the type of thinking that leads to bubbles—and ignored the advice that diversification reduces risk learned (I hope) a painful lesson.

► **House prices.** Those who say we now have a bubble in house prices advocate selling one's house(s) and renting living quarters because you will be able to buy an equivalent or better house at much lower prices in the not too distant future. In addition to the cost and hassles of moving unless one can sell and rent back the current house, I have my doubts about that strategy. Keep in mind that what causes bubbles is an expected future value of an

instrument that far exceeds real current values, which may be zero or nearly so in the most extreme instances. Real-estate speculators, the type who “flip” properties, likely project a continuing stream of increasing house prices while long-term interest rates and mortgage costs stay low. That can drive up prices to some extent, but I don’t think it has or will reach classic bubble levels. The reason is that houses have considerable real current value because people need places to live. It may be true that renting is a better choice than buying right now for those who need to obtain new housing. Even if that is so, I would not advocate renting expecting to buy at much lower prices in a couple of years.

I do not claim any particular expertise in real-estate, so I try to read about what others have to say about the topic before I comment on it. I ran across an interesting article making a case that housing prices are now in a bubble. It went through a lot of analysis about affordability, mortgage terms and quality, attitudes of the general public, and the pace of sales of new houses that are not yet being built. Yet one graph (on the next page) showing the year over year price changes, which the author said indicated a bubble because it is currently high,

to me destroys the rest of his arguments. The graph goes back 30 years, which I think is a long enough period to provide insight about the not too distant future.

The top darker line shows that there has never been a drop in average nominal (current year dollars) U.S. house prices over a one-year period since 1975. There have been a couple of times when prices dropped on an inflation-adjusted basis (the lower dotted line), but those have been moderate, no year worse than about 7%. The worst time was during the late 1970s and early 1980s when inflation was at unusually high levels.

Housing prices are not likely to keep appreciating at their current rate for that much longer, but those who think they can buy a house in a couple years for much less than they could buy the same today are not likely to be able to do so. (There may be a few places that are exceptions.) If we get another period of hyperinflation combined with a severe recession, conditions that can overwhelm the inflation hedge aspect of real-estate, they may be able to get it for a little less in “real” terms, but that is hardly the stuff that makes for bubbles and a subsequent bursting.

