Three Value-Investing Benchmarks

by Gary Smith

I made it through Yale graduate school on a $200 monthly stipend.

One hundred dollars paid for rent in a nasty part of New Haven, and $100 went to food, secondhand clothes, and not much else.

My shoes were held together with duct tape and dinners at the end of the month were often bread and orange juice, sometimes bread and water. I started teaching economics at Yale in 1971, a newly minted Ph.D. with a three-month-old son, $12,000 annual income and less than $100 in the bank.

The Yale economics department asked students what courses they would like added to the curriculum and the runaway winners were Karl Marx and the stock market. I wasn't interested in Marx, but the chair of my thesis committee was James Tobin, who would be awarded the Nobel Prize in Economics, in part, for his analysis of financial markets. So, I volunteered to create a stock market course and asked Jim to recommend a textbook. His immediate answer was "The Theory of Investment Value" by John Burr Williams (Fraser Publishing Company reprint edition, 1997). It had been published more than 30 years earlier, in 1938, and was not really a textbook.

Tobin's recommendation was inspired and inspiring. John Burr Williams and Benjamin Graham laid the foundation for value investing—assessing stocks based on the cash they generate rather than trying to predict zigs and zags in stock prices. Their way of thinking is central to the success of many legendary value investors, including Warren Buffett, Laurence Tisch and Michael Larson.

I didn't use Williams' treatise as a textbook but, over and over, I have relied on the insights I learned from Tobin, Williams, Graham and Buffett. I've been investing and teaching investing for more than 40 years now and I've learned that some lessons are well worth learning, while others are not. The lessons from these legendary investors are worth learning.

Stocks as a Cash-Generating Machine

Decades ago, investing was haphazard. Investors figured that a stock was worth whatever people were willing to pay. Then John Burr Williams unleashed a revolution by arguing that investors could use something called present value to estimate the intrinsic value of a company's stock.

Think of a stock as a machine that generates cash every few months—cash that happens to be called dividends. The key question is how much you would pay to own the machine in order to get the cash. This is the stock's intrinsic value. People who think this way are called value investors.

In contrast, speculators buy a stock not for the cash it dispenses, but to sell the stock to others for a profit. To a speculator, a stock is worth what somebody else will pay for it; the challenge is to guess what others will pay tomorrow for the stock you buy today. This guessing game is derisively called the Greater Fool Theory: Buy stocks at inflated prices and hope to sell to even bigger fools at still higher prices.

Legendary investor Warren Buffett has this aphorism:

"My favorite holding period is forever."

If we think this way, by never planning to sell we force ourselves to stop speculating about stock prices and focus on the cash generated by the money machine over an indefinite horizon. If you do, you will be a value investor—and glad of it.

Let's apply three very simple, but powerful, value-investing benchmarks to three historical situations:

- **March 2000:** I gave a speech at a conference on the booming stock market and the widely publicized "36K" prediction that the Dow Jones industrial average would soon more than triple, from below 12,000 to 36,000. I ended my presentation with this warning: "This is a bubble, and it will end badly."
- **December 2008:** The S&P 500 index was down 40% from March 2000. The unemployment rate was 7.8% and rising as the economy hurtled into the Great Recession. Who would be crazy enough to buy stocks? I raised my hand. During an interview on a local television show, I said, "This is a buying opportunity that only comes around a half dozen times in a lifetime."
- **May 2017:** We have had an eight-year bull market and bears warn that 2017 could be its big finale. What returns can value investors expect over the next 10 years?

Monthly data are available with a small time delay from Robert Shiller's website (www.econ.yale.edu/~shiller/data.htm). Daily data can be found on the Multpl website (www.multpl.com).

The John Burr Williams Equation

A stockholder's total return is the dividend yield plus capital gains. Instead of trying to predict price changes, a value investor might estimate the total return by the dividend yield plus the percent increase in a stock's intrinsic value—the increase in the amount you would pay for the money machine, rather than the change in the market price. In John Burr Williams' dividend discount model, a stock's intrinsic value grows as its dividends grow. I call this investment benchmark the John Burr Williams (JBW) equation. The formula is:

$R = (D \div P) + g$

Where:

- R is the investor's total annual return,
- D is the annual dividend,
- P is the current stock price, and
- g is the annual rate of growth of dividends.

We can apply this equation to the overall stock market by calculating the dividend yield for the S&P 500 and making an assumption about the long-run growth of dividends (perhaps by using the long-run growth of the economy). This total return estimate—the dividend yield plus the dividend growth rate—can be compared to the interest rate on long-term Treasury bonds. I use a 5% dividend growth figure; you can easily adjust the calculations using whatever assumptions you are comfortable with.

Table 1 compares the JBW valuations for the S&P 500 in March 2000, December 2008 and May 2017.