

## The Shape-Shifting 'Equity Risk Premium'

By Kerry Pechter     Wed, Apr 8, 2020

*Investors buy stocks because they believe they will outperform risk-free bonds by five or six percentage points per year over the long-term. But the risk-free rate, equity returns, and the equity risk premium all keep changing.*



We're all familiar with a "premium" grade of gasoline. It's supposed to contain more of a type of octane (C<sub>8</sub>H<sub>18</sub>) than lower grades of gas. That's why it costs about a third more than "regular." But does premium gas contain enough extra octane to justify its price? Hard to say.

Assigning a value to the "equity risk premium" is even harder. If you stopped ten people on the street—if it were hygienic to do that today—it's unlikely that more than one of them, and possibly none, could tell you what that term means.

Yet millions of people who participate in employer-sponsored retirement plans regularly buy stocks (via mutual funds) without knowing which they're doing: paying a premium for risking their money in stocks or receiving a premium for taking that risk.

It's a timely question. Over the month of March 2020, the stock market's equity risk premium grew and shrank dramatically. Before deciding how to respond, savers, investors, and speculators need to refresh their acquaintance with this financial market term of art.

### **ERP (Excuse me!)**

Let's unpack the phrase "equity risk premium," word by word. "Equity" refers to common stocks. Most people know that. But how many understand what risk means, or how to measure it? If they've read "Against the Gods," Peter Bernstein's famous [book](#) on risk, they might.

The [website](#) of John Wiley & Sons, the publisher of financial books, defines the equity risk premium (or ERP) as the "extra return (over the expected yield on risk-free 10-year Treasury bonds) that investors expect to receive" in the long run by investing in a diversified basket of U.S. stocks—perhaps by buying shares in an S&P500 Index Fund.

On average, since the Great Depression, stocks have delivered an attractive average risk premium. That's why people buy them and hold them for a long time, even though stocks

are riskier (more prone to price fluctuations in the short run) than bonds.

But how big is your ERP? Over the past 100 years or so, the average ERP has been about 5%. But averages mean nothing to individuals. At any given time or for any given investor, the ERP depends on many factors: On whether stocks are cheap or expensive today (relative to corporate earnings); on the dividend that stocks yield; on the difference between what you paid for the stocks and their price today; on the inflation rate; on the current 10-year Treasury yield; on whether you're talking about the performance of one stock or of 30 stocks or all the stocks in the equity universe, or some quantity in between.

In short, the ERP fluctuates—from time to time, investment to investment, and investor to investor. Somewhat counter-intuitively, it shrinks when stock prices rise (because their future growth potential shrinks) and grows when stock prices fall (when stocks are “on sale”). It shrinks when 10-year Treasury bond yields are high (because then you can get a pretty good return without taking any long-term risk at all) and grows when the Fed (the Federal Open Market Committee, to be exact) lowers the risk-free rate, which can lower the 10-year Treasury rate (as it did in March).

You can't take the ERP for granted. Yet that's what most investors do. “It is widely believed that while stocks are risky in the short run, in the long run they are sure to outperform risk-free investments like government bonds,” pension expert Zvi Bodie of Boston University [wrote](#) recently. “This is a dangerous fallacy... It leads to the illusion that one can earn an equity risk premium without bearing risk.”

The Federal Reserve sometimes indulges that fallacy. It's been shown that investors will pay more and more for stocks if they believe that, even if stock prices go too high (run out of ERP), the Federal Reserve Board will come to the rescue. The Fed does this by lowering rates when stocks fall, which restores ERP by expanding it from the bottom. That makes bonds less competitive, which stimulates demand for stocks, which drives up prices, which starts to cancel out the new ERP.

That's what happened when the S&P500 Index dropped by 17.5% in the fourth quarter of 2018. Taking note, the Fed halted its policy (at the time) of slowly raising the Fed funds rate. Then, in the second half of 2019, the Fed lowered the rate three times. Welcoming the fresh injection of ERP, investors started buying stocks again. Over the 14-month period that ended in March 2020, they drove the S&P500 Index up by 33%.

As two business school professors described this chain of events in a recent [article](#), “Mean-

reversion in stock returns is driven by a reduction in the equity risk premium [i.e., a rise in stock prices] via the Fed's promise of accommodation should the economy deteriorate."

**ZIRP (Excuse me!)**

Then came the COVID-19 pandemic. Investors sold stocks in the fear that a recession would soon arrive and reduce corporate profits. The S&P500 Index was down 35% at one point in March. Paradoxically, the collapse of stock prices put a ton of ERP back into stocks, making them more attractive. The Fed added even more ERP by lowering the Fed funds rate twice, to zero, in March. Investors cautiously returned to the market, and stocks rebounded a bit.

But now the Fed is employing "ZIRP," aka Zero Interest Rate Policy. The Fed can't lower interest rates any further. For that reason, you'll hear TV pundits say that the Fed is "out of ammunition." (The Fed can still affect rates by buying bonds, but that's another story.) Stocks may have to drop even farther before the ERP rises enough to inspire broad and consistent demand for stocks again.

What should the average investor do now? You should think seriously about buying stocks. They're on sale. (A mutual fund executive once said, "If you liked a stock at \$100, you should love it at \$85.") But your own unique circumstances should drive your decision.

Let's assume that the U.S. government's multi-trillion dollar stimulus bills will prevent a full-blown depression and that average stock prices won't fall any farther than they already have.

If you're under 45, you should put most of your new savings into stock mutual funds. If you're middle-aged, you might take a more conservative approach: Consider selling enough bonds and buying enough stocks to "rebalance" your portfolio back to your pre-crash stock-to-bond ratio.

If you're near or in retirement, don't sell depressed stocks if you can avoid it. If you don't already have a pension, consider creating a personal pension by selling your bonds and buying an income annuity that provides a guaranteed monthly income for life. That'll put gas in your tank.