

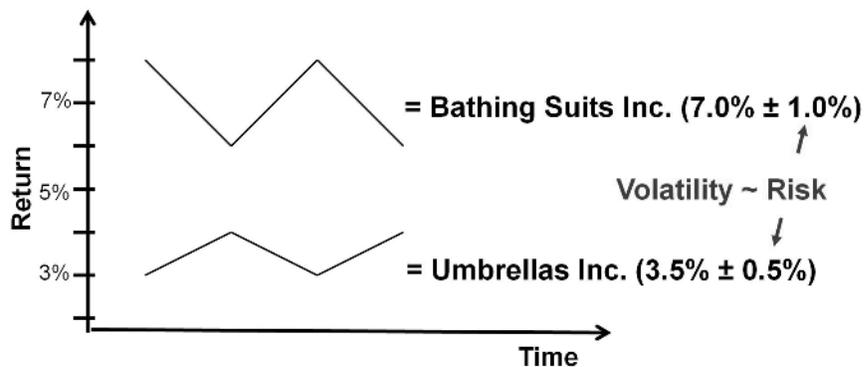
## Rule #4:

# Diversify

Previously, we saw how owning many stocks eliminated “specific company risk.” Now we are going to see that it is not enough to simply own hundreds of companies. You’ll learn the great advantage of owning poorly correlated assets. This part is truly cool! *Magical.*

### Low correlation provides a “free lunch”

To show you, let’s imagine two companies: Bathing Suits Inc. and National Umbrella Company. A rainy year means sales at the Bathing Suit company fall but the umbrella company does well. In a sunny year, the bathing suit company does well and the sales of umbrellas fall.



*Ideal example! Companies' returns move in opposite directions.*

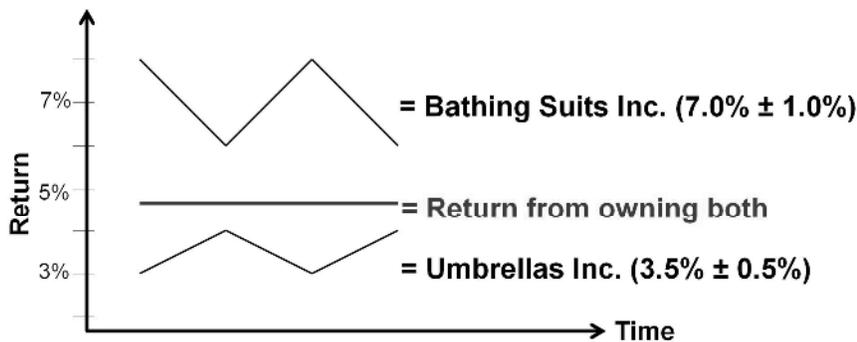
The price of these company stocks move in opposite directions so

they are negatively correlated. The Bathing Suit company is more volatile because the total annual return has an average value of 7.0% but varies by plus or minus 1.0%. This is both higher return and higher risk than the umbrella company which has an average return of 3.5% plus or minus 0.5%.

This is the magical part. Look what happens if you invest 2/3 of your money in the umbrella company and 1/3 in the bathing suit company. WOW! Adding some of the more volatile company to your portfolio not only increases the average return, but it lowers the variability (or risk). Pretty much a free lunch!

---

## Benefits of Low Correlation

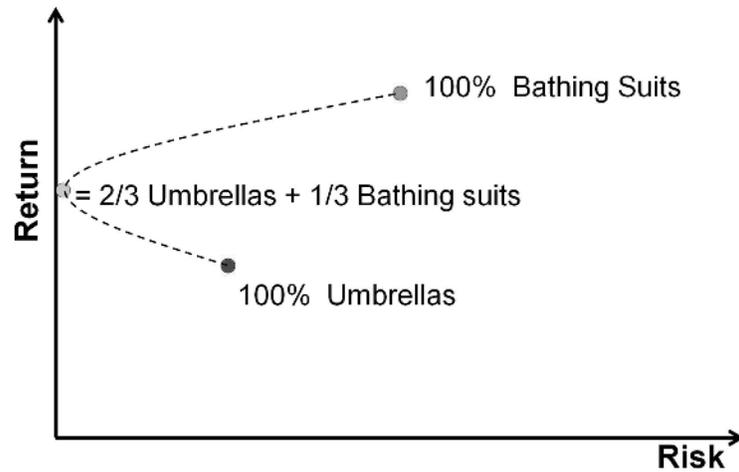


**WOW!** *Adding a More Volatile asset can increase return and lower risk!*

---

*In this example, owning some of both reduces risk (volatility) to zero*

Next, see what it looks like on a risk-return chart. The Bathing Suit Company is in the upper right with twice the expected risk and return as the umbrella company. If you owned 100% of the umbrella company you'd be left and lower (less risk, less return). Now if you gradually invest part of your portfolio in the more risky Bathing Suit Company, your returns increase as you expected, but your risk, as measured by the variability of that return, actually decreases. Owning both is superior to only owning either of the companies.



*Combinations of ownership can be anywhere along dotted line.*

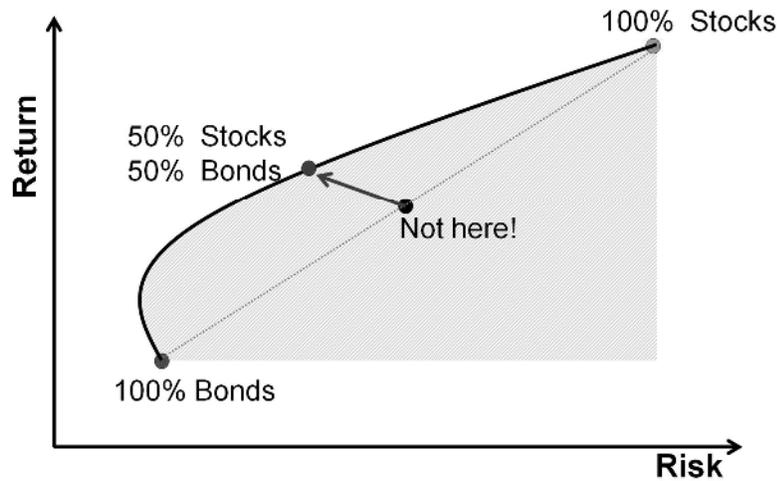
This is an important, and surprising, point. In the previous rule, we saw how different types of investments are distributed along a line that extends up to the right on a Risk-Return chart. This is because investors demand higher expected-returns in exchange for shouldering more risk. But now we see that when you can combine poorly correlated assets, you get the desirable situation where adding a more volatile asset can increase expected returns and lower risk.

### **Everyone should own some bonds**

Negatively correlated stocks move in opposite directions or, more precisely: one tends to produce returns above its average when another the other tends to produce returns below its average. These are hard to find and still achieve diversified investments, so we look for the next best thing: poorly correlated investments. For instance, recall that the price of bonds move in the opposite direction of interest rates. But interest rates don't impact the sales of bathing suits and umbrellas, and the weather doesn't impact the price of bonds. So we pretty generally say that the stock market and Treasury Bonds are nearly uncorrelated and we get this same magical benefit. Adding a little of the stock market to an all-bond portfolio has historically increased the expected returns and decreased the volatility (risk). Going forward, we may expect something similar, but caution: correlations can change when viewed over different timeframes.

---

## Stocks Zig when Bonds Zag!



---

This is precisely how it works in the real world. Say you determined that 50% stocks and 50% bonds was the right level of risk for you. Instead of being halfway between like you might expect in the diagram above, the fact that stocks are poorly correlated with bonds puts you up in a region with higher expected return and lower risk. This is terrific!<sup>1</sup>

What else can we do? If we take a closer look at stocks, we find out that the primary factors that determine the outcome of stock investments in the long-term are: size of the companies, whether they are a glamorous growth company or a less glamorous value company, and then what region of the world it is in.<sup>2</sup>

The companies in the S&P 500 are so huge that this famous benchmark index is a good approximation of the entire US Stock Market. These 500 companies encompass both large Value and large Growth companies. Alternatively, choose a Total US Stock Market Index fund to further diversify with smaller companies and to now own a portion of several thousand companies!

Stocks in foreign companies are even less correlated<sup>3</sup> with the US stock market, but are more expensive to own and have added volatility (risk) from currency exchange fluctuations if the assets are

unhedged. Many investors make 1/4 to 1/2 of their total stock percentage a broad international stock index fund.

You started a plan with goals and a saving routine—fully knowing that you may change it as life happens. In the last chapter, you chose an appropriate level of stocks and bonds that matched your ability, willingness, and need to take risk. That’s always your most important decision. Now you can see how broadly-diversified index funds are perfect for your target stock allocations.

Bonds are much simpler. You can keep the risk out of bonds by keeping them short- to intermediate-term and very high quality. To diversify against inflation it is popular to make half of them US Treasury bonds, called “TIPS”, for Treasury Inflation-Protected Securities. High-quality bonds also differ from high-yield bonds in that they are less correlated with the stock market—important to get that “magical” benefit known as the Modern Portfolio Theory advantage.

Building an outstanding portfolio doesn’t have to be complicated at all!

### **Chapter Footnotes**

Find this and other explanatory videos, smart tips, and links to useful resources at [www.FinancingLife.org](http://www.FinancingLife.org).

(1) The benefits of poorly correlated assets is a small portion of [Modern Portfolio Theory](#) for which several economists won the Nobel Prize. This particular chart of stocks and bonds is a simplification of one that appears in *All About Asset Allocation: The Easy Way to Get Started*, by Richard A. Ferri, 2006, p.45.

(2) The importance of company size and style (growth vs value) for explaining the differences in returns of diversified portfolios is known today as the [Fama-French Three Factor Model](#).

(3) The correlation of various asset classes to the S&P 500 Index is listed in *The Only Guide To A Winning Investment Strategy You’ll Ever Need*, 2005, by Larry E. Swedroe, p 144.