



ROCKWOOD WEALTH MANAGEMENT

Important Considerations

Rockwood Wealth Management

Nobel and Vegas

Gambling in Vegas

The financial media loves market volatility. Exaggerated ups and downs mean higher ratings driven by unwitting investors tuning into expert after expert seeking portfolio advice from magazines and television. During bear markets there prevails such a sense of media fueled negativity that investors may begin to feel that investing is akin to gambling.

We agree, but certainly not in manner that an anxious investor approaches the issue. For a moment, let us concede that investing is just like gambling—but this time, you are the **casino owner**. We've all heard stories of people returning from Vegas and telling tales of big bets that paid off handsomely. Yet Vegas thrives not because people win, but because they lose. The casino operators are not concerned with an individual's short-term winnings—they only care that the parking lot is full. They know that the longer a person plays, the more the house will earn since the percentages are strongly in the house's favor. The identical concept applies to our investment planning.

Our investment plans are grounded heavily in the work of three gentlemen who won the Nobel Prize in Economics in 1990. Together they offer guidelines for investors to understand what they are doing and why, how they function in a capital market and how these markets function around them. Each prize was awarded separately and is a great achievement on its own, yet all three prizes are based upon research that helps to clarify the investment process.

Nobel-winning Research

William Sharpe reveals to us that investors get paid for taking priced risk. You can take zero risk and invest in short-term Treasuries. Or you can take on full market risk and invest 100% in the stock market. Whatever you choose, your portfolio's expected return varies singularly with its beta—its proportional relation to this priced risk. In Sharpe's model, there is just one priced risk factor: the equity premium.

This is return of the stock market above the short-term Treasury rate. So if your security has a return of 1.2% relative to the market when it is up 1%, or is down 1.2%

on average when the market is down 1%, then you have a beta of 1.2. The expected return is 120% of the average equity premium. This is essentially the single-factor Capital Asset Pricing Model (CAPM) that establishes the linear relationship between risk and return that underlies virtually all asset-pricing models.

The CAPM model has strong implications for investors. Every stock portfolio is a subset of the entire market; it carries its proportionate share of total market risk and is compensated with a proportionate share of the market's expected return. As a predictive model, however, it has its limitations. The further portfolios got away from looking like the market, the less the model explained returns. But further research built on this CAPM concept and led to the development of the Three Factor Model by Eugene Fama and Ken French that we use today (but that is another article!).

Harry Markowitz deepened our understanding of investing by showing that taking priced risk is only a piece of the equation. Rational investors not only invest in priced risk, but they diversify away from risks they cannot control. After all, a small handful of securities (or even one stock) can have a similar beta and therefore a similar expected return to a broadly diversified portfolio. But would it be wise to invest your entire portfolio in small number of stocks? Markowitz showed us that investing in a large group of securities with similar risk/reward characteristics does not affect the expected return, but it does serve to lower the volatility (standard deviation) and thus makes the return more predictable.

The rational investor invests where she can capture the return from systematic economic risks for the lowest available standard deviation. Yet so many investors today own a handful of stocks with similar risk characteristics. Going back to our Vegas analogy – that means they are playing in Vegas and the deck is stacked against them! They have all the benefits of additional gut-wrenching volatility without the possibility of additional return! Score one for the house.

The Nobel Committee cited Merton Miller for his research with Franco Modigliani in their work in corporate finance. Miller is often noted for his thoughts on cost of capital. Companies have two ways to obtain capital from investors: they can issue bonds (borrow the



money) or issue stock (surrender participation in the company's earnings). In either case, the company's cost of capital is the investor's expected return. The company promises an interest rate to the bond investor or an expected return to the equity investor. When a company issues stock it forever forgoes the return on that stock – a return it would have otherwise kept had it not needed the operating capital. The return on the stock, even several stages removed from the initial offering, reflects the current riskiness of the capital venture and is the rate it costs the company to get capital.

This simple “cost of capital” notion offers a powerful glimpse into the workings of the capital markets. Capital markets compete for investment capital and rewards investors for risking their capital. Riskier companies need to pay a higher cost of capital than the overall market and the investor should expect a higher rate of return. If these companies did not provide this higher rate return, people would not invest in them! Because capital markets work, we can target the portions of the global markets that provide the highest reward for investment capital within the constraints of an individual's risk tolerance. Furthermore, we can gather all securities together with similar risk characteristics and target these as a distinct asset class. Great things happen when you

target securities with a higher expected return and diversify the risk amongst hundreds or even thousands of securities. You have positioned yourself to capture the risk premiums while dramatically lowering your standard deviation (risk).

We owe a great deal to these Nobel Prize recipients for showing us how markets work and what it means to invest. The relation between risk and return, the importance of diversification and the function of capital are three fundamental concepts that bring structure and discipline to our investment plans. Investors invest in the people, ideas and infrastructure of the capital markets and are rewarded for doing so. In times of financial duress, there is a greater need for capital and hence the cost of capital increases. So does the expected return.

Most investment professionals spend tremendous energy trying to find securities that are mispriced and bet that that they are smarter than other market participants. A rational investor knows that long as they stay invested (keep the parking lot full) they can be assured of being well rewarded for the risk that they have taken. They can be the house and position themselves to take advantage of the healthy returns offered by the capital markets over time.