

## Laying the Foundation–Understanding Risk

Now we are going to talk about the part of investing that no one likes to talk aboutrisk. Everyone wants to invest in something that has high return and no risk.

Sorry folks, that just doesn't exist. If someone tells you it does, they are not being straight with you. Risk and return go hand-in-hand. And there is a good reason why.

But before we talk about that, let's define what we mean by "risk." There are lots of ways to look at risk, but for our purposes we will talk about four types of risk.

The first is the risk of permanent loss. This is what happens if you invest in something and its value declines or goes to zero and never recovers.

The second is the risk that your portfolio increases in value, but falls short of your long-term goals. For example, you wanted to have \$1 million in your portfolio when you reached retirement age, but you only have \$850,000.

The third type is really not risk at all as normal people understand it, but investment professionals often refer to volatility as risk. Volatility is a measure of how much an investment or a portfolio goes up and down in value over time.

The fourth type is a subtle form of risk: loss of purchasing power. As you probably know, inflation reduces the value of your money. In every year that we experience inflation, you can buy a little bit less with each dollar you have. So doing nothing with your money is risky too.

So what can we do about these four types of risk? Well, by building a sufficiently diversified portfolio we can, as a practical matter, greatly reduce or even eliminate the likelihood of permanent loss. Of course, the value of our portfolio will go up and down in the short-term, but if we have enough time, and properly diversify our portfolio, we can be reasonably assured that we will not suffer a permanent loss.

What about the second type of risk? Can we eliminate the possibility that you will fall short of your long-term goals? The answer to this question depends on how much money you have today, how much money you hope to have in the future and how much time you have in order to cover the gap.

By building the right portfolio, you can improve your chances of reaching your goal. But how much of this risk you can eliminate depends on how close you already are to achieving your goal and how much time you have to do it. What about the third type of risk—volatility? Can you eliminate upward and downward market swings? The answer is yes, of course you can. You can stick your money in your mattress and you will never experience market volatility. But if you do that, you are likely to experience our fourth type of risk—loss of purchasing power. If you want to grow your money over time you will need to take it out of your mattress and put it to work in the financial markets. If you do that you will experience some level of volatility—it is unavoidable. You can control volatility to some extent through proper portfolio construction, but you can't eliminate it.

But that's really not a bad thing. If there wasn't some level of risk in the financial markets, you would not be able to generate a return on your money. That's because you are quite literally being paid to take risk. Risk and return go hand-in-hand.

So we can eliminate some risks and control others, but we cannot eliminate it altogether. Risk is a necessary part of investing.

Our challenge as investors is to identify our goals and then determine the amount of risk we need to take in order to reach those goals. If we aren't willing or able to take that level of risk, we need to adjust our goals downward to a more realistic target. That is a trade-off that we will discuss in subsequent lessons.

Today's take-aways are:

We should think about four types of risk:

- Risk of permanent loss
- Risk of falling short of our goals
- Volatility
- Loss of purchasing power

We can reduce or control all of these risks through proper portfolio construction. But risk and return go hand-in-hand. The good news is, we are paid to take risk.