

Chapter 14

Financial Goals and Asset Allocation

If you don't know where you're going, you'll end up somewhere else.

Yogi Berra

One critical decision each investor must make is to decide how much money to place in stocks and how much to place in bonds. This decision would be simple if we knew the future. If stocks are going up, place 100% position in stocks. If stocks are going down, a 100% bond portfolio is the only alternative. Unfortunately, life is not so simple. As we learned in Chapter 5, errors in market timing are partially responsible for part of the performance gap. Most people will find a safer solution is to place a portion of their money in stocks and a portion in bonds. This is called *strategic asset allocation decision*.

How do you determine the correct asset allocation for your account, without trying to time the markets? There is the right way and there is the wrong way to determine an appropriate allocation. The wrong way is what I call the Cosmopolitan Magazine method. It is based on a dumb questionnaire that is supposed to determine your investment psyche in 10 questions or less. Many stockbrokers and other investment advisors trying to sell products and service use the overly simplistic Cosmo approach. The second method of asset allocation is more scientific. Large pension plans and other institutional investors use a liability-based approach. This method calculates an asset allocation based on highest probability of meeting an investment goal, and ensures that allocation is not too risky for the client.

The Cosmo Method

Every issue of Cosmopolitan Magazine prints a questionnaire to determine what type of person you are. For example, “Are You a Workaholic? Answer these 10 questions and find out!” You take the quiz only to find out you have no life or real purpose for living. The investment industry has adopted a similar questionnaire to determine a fast, but terribly unreliable asset allocation for clients. Generally, a person is asked a series of simple questions, which the answers are plugged into “highly sophisticated computer model”. This canned computer program then spits out an allocation between stocks and bonds that is supposed to represent your true needs.

Unfortunately, the Cosmo method of asset allocation is inadequate. It oversimplifies the investment process and generates riskier portfolios that would otherwise be recommended. From a salespersons perspective, Cosmo models are great. They get people to invest more in stocks and other risky assets that pay higher commissions and fees. While there is no problem in having risky assets in a

portfolio, the canned models hide the short-term volatility that often occurs. This hidden risk becomes a big problem for investors when markets become volatile. A risky portfolio may sound appealing in a bull market, but history shows most investors will not hold on in deep bear market. Portfolios thrown together using a simple 10 question quiz will lead to inadvertent market timing mistakes in the future, which widens the performance gap.

William Sharpe, STANCO 25 Professor of Finance at Stanford University and a Nobel Prize winning economist, calls the mass-market approach to asset allocation “Financial Planning in Fantasyland”¹. There are so many problems with the popular Cosmo model that it was not possible to include them all in this chapter. As a result, I wrote Appendix 3 on the subject.

Back to Basics

Why do we invest in stocks and bonds? There is no point if we do not have investment goals. Though most people will say they have goals, they cannot define it. “Make a lot of money” is not a goal. “Do well” is not a goal. “Make one million dollars” is a goal. When retirement day comes, our goal is have enough saved so that the income from our nest egg will supplement social security and private pensions. Investors need to know how much money they need to save and how they will attain it.

Prior to joining the financial services industry, I spent eight years flying fighter aircraft in the Marine Corps. Every mission I flew began with a thorough pre-flight plan. Although no mission flew exactly as planned, no mission flew without a plan. Investing is the same. Investment planning instills confidence that leads to greater wealth. According to a recent survey, if two people have the same income, but one has accumulated significantly more wealth than the other, the wealthier person likely spent twice as much time planning their investments as the less wealthy person².

For less than \$50 you can buy a top-of-the-line financial planning software to assist you in creating a plan. These off-the-shelf programs offer step-by-step instructions. The financial plan will help you understand where you are, where you would like to go, and how to get there. The process will lead you to a greater understanding of your personal mission that needs to be accomplished.

¹ William F. Sharpe, “Financial Planning in Fantasyland”. This paper is an expanded version of a dinner speech presented at a conference sponsored by the University of California, Davis Graduate School of Management on October 17, 1997. It can be found on Sharpe’s personal web page.

² Thomas J. Stanley, Ph.D. and William D. Danko, Ph.D., *The Millionaire Next Door*, Pocket Books, New York, NY, 1996, pg 97

Calculating a Minimum Rate of Return

One of the benefits of working a financial plan is that it isolates the *minimum required return* needed on your investments to achieve your goals. This figure is easy to calculate and will help you decide the proper asset allocation mix of stocks and bonds to have in your portfolio. Sometimes a financial plan needs to be revised if the minimum required return is not feasible, or if the asset mix is too risky for the investor. The minimum rate of return is a mathematically derived number based on four factors:

1. The amount of money you have already saved
2. The amount you expect to save annually in the future
3. The number of years you have until retirement
4. A minimum amount needed at retirement

Once you have the information above, a minimum return can be derived using a simple annuity calculation found on any financial calculator, spreadsheet, or financial planning program. Most people can come up with the first three points, but they have trouble understanding when they have enough to retire. This is not difficult to figure out, as long as your lifestyle is not going to change radically in retirement. To find the amount you need at retirement, following these simple steps:

- 1) Take your average annual income before tax and subtract the amount you save each year. That is the amount you spend.
- 2) Multiply your spending amount by 20 to come to your initial minimum retirement amount.
- 3) Adjust the amount for inflation.

Here is an example of the process:

1. A 50-year-old man earns \$100,000 per year and has \$700,000 in savings. He spends \$85,000 per year (including taxes) and saves \$15,000. He would like to retire at age 65 and live the same lifestyle.
2. Multiply \$85,000 times 20 to find the initial minimum retirement amount of \$1,700,000. Adjust for a 2% inflation rate over the next 15 years and the *inflation adjusted* minimum amount needed at retirement is \$2,300,000.
3. Using a financial calculator, plug in a \$700,000 present value, a \$2,300,000 ending value, deposit \$15,000 per year, and run for 15 years. The result is an implied rate of return of 7%.

4. If the man's account compounds at 7% over the next 15 years, he will reach his goal at retirement. He can then withdraw 5% of the account each year for the rest of his life. Any extra earnings will stay in the account as an inflation hedge.

In the example above, we have left out a few things. We assumed the man has only income from savings and no other at retirement. In reality, he will probably receive Social Security and possibly a pension. He may also receive an inheritance or sell real estate. These adjustments could be factored into the model as well.

Calculating Maximum Risk Tolerance

In our example above, we calculated the minimum required return of 7%. What asset allocation between stocks and bonds has a high probability of reaching this goal? Recall from Chapter 11 the following data:

Future Estimates of Stocks, Bonds, and Inflation

Benchmark	<i>Estimate 2000-2030</i>
Inflation Rate	2%
Bond Returns (nominal)	5%
Bonds – Inflation adjusted	3%
Stock Returns (nominal)	8%
Stocks – Inflation adjusted	6%

Using the information in the table, a 7% return implies about a 65% position in the stock market earning 8% and a 35% position in the bond market earning 5%. Mathematically this works out to 7%. Theoretically, a 65/35 split would be the correct allocation, but is that a reasonable portfolio for a 50-year-old man with 15 years to retirement? Can the man handle the risk implied in 65% stock position? Does the level of risk implied by the required 7% return match his personality? It depends on his tolerance for risk.

If a person invests heavy in stocks because it is what they *think* they need to make their retirement account work, they may be doing themselves more harm than good. If an asset allocation is beyond the envelope of a person's risk tolerance, there is a strong potential they will sell out of stocks during a bear market. That destroys the entire plan and significantly reduces return.

Stress Testing an Asset Allocation

Frequently, I meet people who say another advisor recommended a more aggressive asset allocation than I have. Normally, the other advisor has used the *typical Cosmo questions* and came up with a greater allocation toward stocks, which of course pays that advisor higher commissions and fees. To show the client there is more to an asset allocation than a simple questionnaire, I use the 73-74 Stress Test.

Imagine holding a majority of your portfolio in stocks during the 1973-74 bear market when the averages fell over 40% and inflation was raging? Would you have stayed in? Most investors didn't. Using the 1973-74 time period to stress test a portfolio is a great tool. Every financial advisor should learn to use this method or something similar so they have an idea of their client's potential reaction to a bear market.

In this example, we will use a portfolio of 65% stock and 35% bonds. Historically that allocation has a good chance of producing a 7% required return over a 15-year period. Let us assume it is the beginning of 1973, and our "client" agrees to our 65/35 allocation. Using the data from our example above, our client invests \$700,000 and he will add \$15,000 per year going forward. Here is the initial allocation:

**Initial Portfolio Allocation
January 1973**

Stocks (65%) S&P 500	Bond (35%) 5 yr. Treasury	Total Account
\$450,000	\$250,000	\$700,000

1973 was a terrible year. The stock market fell almost 15% and the economy was on shaky ground. Our client lost over \$50,000. It was time to balance the portfolio and add another \$15,000 for this year's contribution to the plan.

**Portfolio Value
December 1973**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$384,000	\$262,000	\$646,000
	Plus new cash	+15,000
	Total at year end	\$661,000

The asset allocation of the portfolio is out of kilter. In order to go back to a 65% stock 35% bond position, our client needs to buy \$46,000 worth of stocks and sell \$31,000 worth of bonds. He is reluctant, but decides to go along with the plan.

**New Portfolio Allocation
January 1974**

Stocks (65%) S&P 500	Bond (35%) 5 yr. Treasury	Total Account
\$430,000	\$231,000	\$661,000

1974 was worse than the 1973. The stock market fell over 26% and the economy was flat on its back. Not to mention the President resigned, and the Arab oil embargo was in full swing. Our client lost over \$100,000 in 1974. It was time to balance the portfolio and add another \$15,000 for this year's contribution.

**Portfolio Value
December 1974**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$316,000	\$244,000	\$560,000
	Plus new cash	+15,000
	Total at year end	\$575,000

The portfolio needs to be balanced again. In order to put it back to a 65% stock 35% bond position, our client needs to buy \$59,000 worth of stocks and sell \$44,000 worth of bonds. So far he has lost \$155,000 since he started with our strategy, and he is two years closer to retirement.

**Proposed New Portfolio Allocation
January 1975**

Stocks (65%) S&P 500	Bond (35%) 5 yr. Treasury	Total Account
\$375,000	\$200,000	\$575,000

This year, you do not need to call the client because he called you! He no longer wants to have so much in stocks, they are too risky and he is losing too much money. He wants you to put most of the money in a safe Treasury bond portfolio. He will consider leaving \$100,000 or so in the market when it goes up. *Click!* The Cosmo approach to asset allocation does not work.

A More Conservative Approach

Let's go back to the beginning of 1973. Instead of choosing a portfolio of 65% stocks and 35% bonds we recommend the opposite, a portfolio of 35% stock and 65% bonds. Our client agreed to our allocation and we invest his \$700,000 as follows:

**Initial Portfolio Allocation
January 1973**

Stocks (35%) S&P 500	Bond (65%) 5 yr. Treasury	Total Account
\$245,000	\$455,000	\$700,000

Recall that 1973 was a terrible year. The stock market fell almost 15% and the economy was poor. Our client lost a little. It was time to call the client to discuss his options and add another \$15,000 for this year's contribution.

**Portfolio Value
December 1973**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$209,000	\$470,000	\$679,000
	Plus new cash	+15,000
	Total at year end	\$694,000

In order to put it back to a 35% stock 65% bond position, our client needs to buy \$34,000 worth of stocks and sell \$19,000 worth of bonds. We call the client and he agrees.

**New Portfolio Allocation
January 1974**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$243,000	\$451,000	\$694,000

1974 was worse than the 1973 and the stock market fell over 26%.

**Portfolio Value
December 1974**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$178,000	\$477,000	\$655,000
	Plus new cash	+15,000
	Total at year end	\$670,000

**Proposed New Portfolio Allocation
January 1975**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$235,000	\$435,000	\$670,000

We call the client for his \$15,000 contribution and explain that it is time to balance the portfolio back to 35% stock, 65% bond position. The client is reluctant, but eventually decides to stick with the plan. He gives us permission to re-balance the portfolio. **The 35% stock, 65% bond allocation worked for this client because it is was not beyond his risk tolerance.** It passes the 73-74 Stress Test.

The portfolio with an initial 65% in stocks was too risky for the client, and he used market timing to reduce his allocation to stocks at *precisely the wrong time*. A better allocation was 35% stocks because the client stayed with the portfolio during the entire period, even during the worst market conditions. In 1975, stocks were up 37% and in 1976 the market gained another 24%. As a result, the conservative portfolio made more money than the aggressive one!

The Moral of the Story

*Risk comes from not knowing what you are doing.*³

Warren Buffett

A large position in stocks may sound appealing after a strong bull market, but most people find it difficult to stick with the high allocation during a bear market. It is very important to understand the risks in the market and how you will handle the risks. Asset allocations work over long periods of time only if investors keep the same allocation during the entire period. The asset allocation you should choose is the one you can stick with during all market conditions and over a very long time. The highest yielding portfolio is not the one with the most stocks. It is the one that is within the risk tolerance of the investor. A lower allocation to stocks will yield a higher long-term return if investors behave correctly in a bear market.

³ James Rassmussen, "Buffett Talks Strategy with Students", Omaha World-Herald, Jan 2, 1994, pg 17s