KEATING
Wealth Management

Asset Allocation Made Easy

We believe that lifetime investment returns are primarily, if not entirely, governed by two variables: asset allocation and behavior.

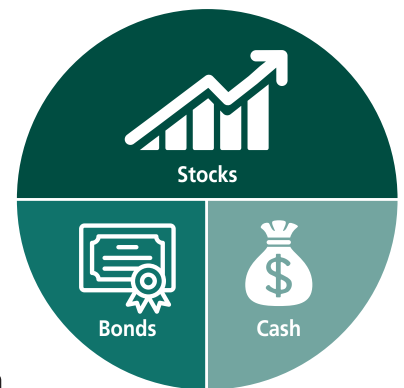
The conventional wisdom regarding asset allocation is to spread one's assets among stocks, bonds and cash, primarily to mitigate the volatility of the equity market. This can be costly advice, because the attempt to shield against the equity market's temporary volatility also deprives an investor of the permanent incremental returns offered by equities.

Behavior is beyond the scope of this essay, other than to note the following: Historically, investors who've been willing to ride out the equity market's occasional sinking spells have been rewarded with significantly higher returns. Indeed, over the last three-quarters of a century, the equity investor has earned a real return—net of inflation—nearly three times that of the bondholder. But it would be both imprudent and impractical for a retiree, for example, to have 100% of his assets invested in equities.

Simple Asset Allocation Model

In the real world, people need cash to pay for their day-to-day living expenses, and, ideally, they should have additional cash reserves available for emergencies. People also need to set aside a capital sum for any known future commitments that will become due and payable within five years. Thus, our simple asset allocation model is:

1. **Cash.** Retirees should set aside an amount sufficient to cover two years' worth of living expenses in a side fund, the purpose of which is to enable the suspension of equity withdrawals if a long and/or steep bear market strikes relatively early in retirement. (Those still accumulating should set aside one year's worth of expenses as an emergency reserve.)
2. **Bonds.** Funds to cover foreseeable capital needs (e.g., a tuition payment) over the next five years should be invested in Treasurys (or equivalent) with a corresponding maturity.
3. **Equities.** The remainder of the portfolio should be invested in equities, preferably in a highly diversified, low-cost, tax-efficient vehicle such as an equity index fund.



The "Sequence of Return" Problem for Recent Retirees

If a recent retiree who had just begun making withdrawals ran into an immediate bear market, he would experience a significant depletion of his principal, because each withdrawal would be taking larger and larger chunks out of it.

But with a two-year cash reserve set aside as a cushion, the retiree would have the wherewithal to suspend equity withdrawals for a considerable period of time when the market takes a nosedive, thus preserving his ability to profit from the inevitable upswing.

Over the course of the last decade, the quest to mathematically solve the sequence of return problem—which is to say to determine optimal withdrawal rates and strategies—has become the holy grail of the financial

planning profession. But humans are emotional, so for any strategy to work in the real world it has to be simple to implement and comfortable to adopt behaviorally. In that vein, we offer the following tactic as a mechanism for the retiree relying on equity withdrawals to cope with the onset of a bear market *early in the retirement period*.

We recommend that any time the value of his equity portfolio drops more than 25% from its peak, the retiree suspends selling equities and instead starts drawing money from his cash reserve side fund. And whether it's a 25% decline or some other pre-determined level, ***the important thing is establishing that number at the outset and sticking to it when the market falls***. (In the case study that follows, we illustrate numerically why two years is adequate to ride out even a severe bear market.)

Over time, the pressing need for the side fund withers away, because historically the 10% annual return of equities has been three times higher than the 3% annual increase in the cost of living. Thus, even as withdrawals rise to keep pace with inflation, the account value of the equity portfolio will in the long run be continuing to grow as well—though at a *multiple* of the cost of living. That is, in fact, why one owns equities in the first place.

But let's return to our illustration where the recent retiree has encountered a bear market and suspended his equity withdrawals. This leads us to two related methodological questions:

1. What is the threshold for resuming the sale of equities to fund withdrawals?
2. Once the crisis is past, what's the best way to replenish that depleted cash reserve?

Resumption of Sales

Historically, a bear market—defined as a peak-to-trough decline of 20%—occurs on average once every five to six years. There have been 11 bear markets since the end of World War II, with an average decline of 34% and an average peak-to-trough duration of 16 months. Six of the bear markets had declines of 30% or more, and five of the bear markets have lasted for 18 months or more. Under this framework, once the 25% tripwire has triggered, the cessation of withdrawals will continue for 24 months until the cash account has been depleted. Thereafter, one will resume selling equities to fund withdrawals.

Refilling the Tank

As with the original 25% tripwire number, there can be more than one methodology that works for determining when and how to restock the emergency tank. It might be tempting to do that as soon as possible, but that's likely to end up being a costly choice.

Since bear markets—especially major ones—tend to be relatively far apart, there's bound to be at least a few years between them, which offers an opportunity to let the equity portfolio take advantage of the market recovery before funneling funds back into the rainy-day account. Equally important, long/deep declines are often followed by dramatic recoveries. Recent example: The S&P 500 almost quadrupled in the eight years following the bottom of the Great Panic (March 9, 2009).

So when is the best time to start rebuilding that cash account? Well, we'd want to see a significant recovery first, but we never want to try to time the market, because it can't be done. Instead, we look for another trigger point based on the valuation of the stock market, such as an S&P 500 12-month forward P/E ratio of 20x, which is about 25% higher than the long-term forward P/E ratio average of 16x, and which would therefore indicate a fairly robust recovery.

Once the valuation threshold is reached, it's time to stop reinvesting dividends and let them flow over to the side fund (if that wasn't already the case). Another option is to take advantage of any market appreciation beyond the annual withdrawal rate by selling off the overage. Once the reserve tank has been refilled, dividends can be reinvested and appreciate over time along with the market.

Cash and Equities

In summary, the best way to fund a comfortable retirement is to set aside cash for liquidity, buy Treasurys to match known capital needs, and invest everything else in equities. Over time, equities have been the best way to preserve and grow purchasing power. Equities are more volatile than bonds, and that bumpy ride is precisely the reason for the higher returns. Volatility is a short-term disturbance, but the long-term returns from equities are enduring. Equities are a good investment because they go down temporarily and historically have gone up permanently.

Is Two Years Long Enough?

People often worry that they might need enough cash for more than two years, just in case we see another market crash like the one in 2008. Why not set aside five years' worth of living expenses to be ultra-safe? Let's take a look at the numbers.

In a typical retirement spending plan, a retiree liquidates and withdraws as little as 3% and up to 5% of the portfolio value annually to fund living expenses. For numerical simplicity, let's assume that the withdrawal rate is 5%. That means setting aside about 10% of the portfolio value in cash to cover two years of living expenses.

To cover five years of living expenses, it would be necessary to set aside about 25% of the portfolio value, which would severely limit long-term investment growth. Additionally, the chances of another decline like the Armageddon scenario of 2008 happening anytime soon are improbable. And even if—in a perfect storm—a similar financial crisis occurred right after an investor retired, ***two years' worth of cash would still suffice***. To stress test our methodology, let's consider two doomsday scenarios from the 2007-2009 financial crisis, which was the most severe bear market since the end of World War II, and where the S&P 500 experienced a 57% peak-to-trough decline.

Scenario

1 Retiring at the Market Peak

Consider the experience of a person who invested $1 million in an S&P 500 index fund upon his retirement at the end of September 2007 (S&P 500 price: 1,527), shortly before the market peaked on October 9 (1,565). This retiree began monthly withdrawals at an annualized rate of 5% of his portfolio value. Not until the end of September 2008 (i.e., 12 months later) would the account have dropped below the 25% tripwire (September 29, 2008: 1,106). At that point, the retiree would have switched over to the cash reserve fund and continued drawing cash for another 24 months. The bear market reached its trough on March 9, 2009 (677). By the time his cash reserves had been depleted in September 2010, the S&P 500 had recovered to 1,141—3% higher than when the withdrawals were suspended.

2 Retiring Just Before the Market Plunge

What if the retirement instead began at the end of August 2008 (1,282), after the market started dropping, but before Lehman Brothers' bankruptcy in September 2008 and before it reached bottom? In that scenario, the retiree's account would have hit the 25% tripwire 41 days later on October 9 (910), triggering the switch to cash. Twenty-four months later, the market had recovered to 1,165—a 28% increase from the level when withdrawals were suspended. In both scenarios, the equity withdrawal suspension allowed the retiree to ride out the storm and resume selling equities in a recovering/rising market.

Fortunately, major panics like the 2008 financial crisis are rare. But it's easy to see that even when they do occur, cash to cover living expenses for two years should be more than sufficient to ride out a bear market. Setting aside enough for five years would not only be overkill; it would be imprudent. Just as there is no such thing as a perfect withdrawal rate, there is also no such thing as a perfect defense. However, there is such a thing as a great financial plan to help anybody achieve his financial goals—no matter what happens in the markets, politics or the world.