



Asset Allocation Strategy Helps Balance Risk and Reward in Your Portfolio

The old cliché that reminds you not to put all your eggs in one basket still applies to the investment world. It clearly defines the importance of asset allocation, in which you divide your investments among asset categories to help balance your potential risk and reward.

The impact of asset allocation can be significant. For example, studies by Ibbotson Associates, a Chicago-based research firm, found that about 90% of a mutual fund's return over time was based on how its assets were allocated. The specific investments you choose, and when you buy and sell them, account for only a small portion of your return.

Your portfolio generally should include various types of investments that are

expected to perform differently during particular economic conditions. When you are diversified in this way, a decline in any single investment has less of an impact on your overall portfolio and may be offset by increases in other investments.

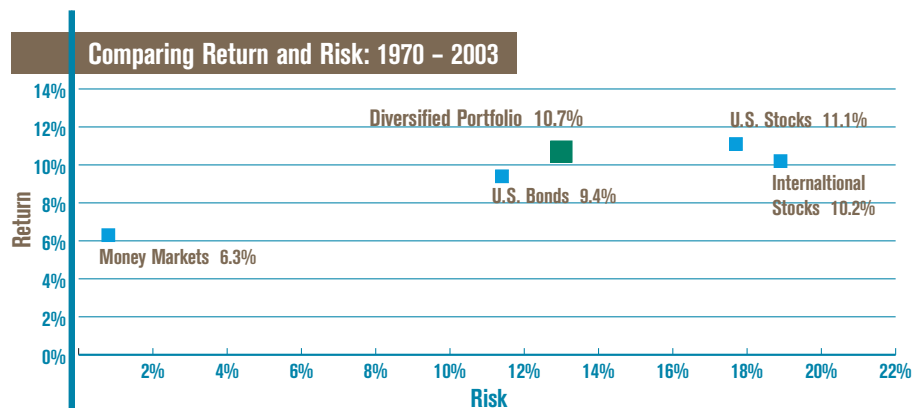
It is important to know three things in planning your asset allocation mix:

- your goals, such as retirement or a college education;
- your risk tolerance, or tolerance for changes in the value of your investment portfolio;
- your time horizon, which defines how long your investments will be working toward your goals.

(continued)

What Could Diversification Mean to My Portfolio?

Since 1970, a diversified portfolio of 50% U.S. stocks, 20% international stocks, 20% bonds and 10% money market investments has averaged nearly as high a return as a portfolio comprised only of U.S. stocks (10.7% a year compared with 11.1%) while being exposed to about the same risk as an all-bond portfolio. Past performance is no guarantee of future results. ➔



Source: Calculated by American Century Services Corporation using information and data presented in Ibbotson Investment Analysis Software ©2003 Ibbotson Associates, Inc. All rights reserved. Used with permission. Risk is measured by how much each investment's annual return differs from its average performance over time (standard deviation). Stock returns are represented by the S&P 500 Index, an unmanaged group of stocks considered to represent the stock market in general. Bond returns are represented by a government bond of approximately 20-year maturity. Money market returns are represented by a Treasury bill of no less than 30-day maturity. International stock returns are represented by the MSCI Europe, Australasia and Far East Index (EAFE), a widely followed group of stock markets in 20 countries. All examples are for illustration only and do not reflect the performance of any American Century fund. The indexes are not investment products available for purchase. Dec. 31, 1969, to June 30, 2003.

■ **Can changing market conditions affect the asset allocation of my portfolio?**

Yes. Changes in securities prices over time can throw your asset allocation off your intended track. For example, if some stocks you own appreciate significantly, the equity portion of your portfolio may be larger than your desired allocation. Conversely, a decline in the value of other securities may leave your portfolio under-weighted in a particular asset class.

FAST FACTS

Historical returns on model portfolios:²

- A conservative portfolio of 40% stocks, 45% bonds and 15% money markets has had an average annual return of about 7.7%.
- A moderate portfolio of 60% stocks, 30% bonds and 10% money markets has had an average annual return of about 8.7%.
- An aggressive portfolio of 75% stocks, 20% bonds and 5% money markets has had an average annual return of about 9.4%.

Choosing your investments

Next, consider the various types of investments available to you and their risks and rewards. Higher risk is associated with the possibility of higher reward, and the inverse also is true. While it can seem attractive to chase the return of the latest hot stock, you are more likely to come out ahead if you strike a proper balance among investments in stocks, bonds and money markets.

- For long-term growth, stocks are hard to beat. Although past performance can't predict what will happen in the future, since 1925, U.S. stocks have averaged an annual return of about 10.3% — a higher return than most other investments. But stocks also carry the highest risk.
- Many investors further diversify their portfolios by adding international investments. Although these investments may have the additional risk of currency fluctuations and potential political unrest, their presence in your portfolio can help offset the risks associated with volatile periods in domestic markets.
- The prices of bonds — which essentially are loans to governments, agencies or corporations — generally fluctuate less than those of stocks, so bond investments are considered less risky than stocks. Their returns are more modest as well, averaging about 5.5% per year since 1925.
- Money market investments¹ often provide reliable but smaller returns. Although such investments are not guaranteed, they can provide a relative degree of safety along with easy access to your money if needed. Money market investments have a historical annual average return of about 3.8%.

Many investors build an asset allocation mix using mutual funds in each category, rather than individual securities, which adds an additional measure of diversification as well as professional investment management.

Review your portfolio on a regular basis, paying special attention to changes in the weighting of the types of investments you own. Based on your review, you may want to rebalance your portfolio to maintain your chosen investment mix.

Asset allocation takes discipline, but the payoff in risk reduction can help protect your portfolio and ultimately your personal financial goals.

¹ An investment in a money market fund is neither insured nor guaranteed by the FDIC or any other government agency. Yields will fluctuate, and although the fund seeks to preserve the value of your investment at \$1 per share, it is possible to lose money by investing in the fund.

² Source: Calculated by American Century Services Corporation using information and data presented in Ibbotson Investment Analysis Software ©2003 Ibbotson Associates, Inc. All rights reserved. Used with permission. Stocks are represented by the S&P 500 Index, an unmanaged group of stocks considered to represent the stock market in general. Corporate bonds are represented by the Salomon Brothers Long-Term High-Grade Corporate Bond Index, which includes nearly all Aaa- and Aa-rated bonds with at least 10 years to maturity. Money markets are represented by a Treasury bill of no less than 30-day maturity, as calculated by Ibbotson Associates. Stocks may be volatile. Treasury bills are guaranteed by the U.S. government. Dec. 31, 1925 - June 30, 2003.

At American Century Investments, we are committed to providing the products, tools and educational information you need to make informed financial decisions. Call Investor Relations for more information: 1-800-345-2021 or 816-531-5575 weekdays 7 a.m. to 7 p.m. and Saturdays 9 a.m. to 2 p.m., Central time.

Automated Information Line: 1-800-345-8765
P.O. Box 419200 • Kansas City, MO 64141-6200
www.americancentury.com

This information is for educational purposes only and is not intended as investment or tax advice.



**Does Asset Allocation Policy Explain
40%, 90%, or 100% of Performance?**

Roger G. Ibbotson and Paul D. Kaplan

Full article printed in the *Financial Analysts Journal*,
January/February 2000

Does Asset Allocation Explain 40%, 90%, or 100% of Performance?

The answer to the question in the title depends on how you ask the question and what you are trying to explain. According to the well-known studies by Brinson et al., more than 90% of the variability of a portfolio's performance over time is due to asset allocation. In other words, market movement of the asset classes in which you are invested dictates 90% of the movement of your portfolio. So if you are trying to explain the *variability* of returns over time, asset allocation is very important.

Unfortunately, the Brinson studies are often misinterpreted. The 90% result has commonly been used to explain the *amount* of a typical fund's return and how much impact asset allocation has on the different returns between funds, i.e. *across funds*. To answer these questions a different study is required.

To address the controversy about the importance of asset allocation policy, we formulate three distinct questions:

- 1) What portion of the return *amount* is explained by asset allocation?
- 2) How much of the variation of returns *across funds* is explained by differences in asset allocation?
- 3) How much of the *variability* of returns across time is explained by asset allocation?

We believe that much of the controversy about the importance of asset allocation is due to treating the answer that Brinson et al. provided to question (1) as an answer to questions (2) and (3). The purpose of this paper is to address the controversy by asking and answering *all three* questions.

Data Sources and Methodology

We look at ten years of monthly returns on 94 balanced mutual funds and five years of quarterly returns on 58 pension funds. The 94 funds are all of the balanced funds in the Morningstar universe that have at least ten years of data ending March 31, 1998. Policy weights for each fund were estimated using returns-based style analysis over the entire 120-month period.

The same type of analysis was performed on quarterly returns of 58 pension funds over the five-year period 1993-1997. However, rather than using estimated policy weights and the same asset class benchmarks for all funds, the actual policy weights and asset class benchmarks of the pension funds were used. In each quarter, the policy weights were known in advance of the realized returns.

What portion of the return *amount* is explained by asset allocation policy?

Individual investors frequently misunderstand the results of the Brinson studies as an answer to this question. To answer question (1) we divide the compound annualized asset allocation policy return by the compound annualized portfolio return over a given time period. In other words, we create a portfolio of benchmark asset classes that matches your asset allocation policy. Then, we divide the return of the benchmark portfolio by your portfolio return. We find that, on average, the ratio is 1.0, or 100%. So, about 100% of the return *amount* is explained by asset allocation policy.

How much of the variation of returns *across funds* is explained by differences in asset allocation?

We answer question (2) by running a cross-sectional regression of entire-period compound annual fund returns on entire-period compound annual policy returns. For the mutual funds studied, 40% of the return difference from one fund to another is explained by policy differences, while for the pension fund sample the result is 35%. Thus, about 40% of the variation of returns *across funds* is explained by policy. For example, if one fund returns 5% more than another, then on average about 2% of the difference (40% of 5%) is explained by a different asset allocation, while the remaining 3% difference (60% of 5%) is explained by security selection, timing, and fee differences between the funds.

How much of the *variability* of returns across time is explained by asset allocation?

Brinson’s study answered this question. Following the same method as Brinson et al. we regress each fund’s total returns against its policy returns. We find that, on average, about 90% of a fund’s fluctuation is due to market fluctuations in the fund’s underlying asset classes—that is, its asset allocation.

Conclusion

Our analysis shows that while asset allocation explains about 90% of the *variability* of a fund’s returns over time, it explains only about 40% of the variation of returns *across funds*. Furthermore, asset allocation explains a little more than 100% of the *amount* of returns. Thus, the answer to the question, “does asset allocation policy explain 40%, 90%, or 100% of performance?” is “all of the above” since the question can be interpreted in any or all of these three ways.

Measures of Performance	Percent of <i>variability</i> of returns across time explained by asset allocation policy	90%
	Percent of variation of returns <i>across funds</i> explained by differences in asset allocation policy	40%
	Percent of return <i>amount</i> explained by asset allocation policy	100%