

The Idiot's Guide To Asset Allocation



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The finance industry constantly strives to confuse investors with new, more sophisticated and increasingly complex ways to manage risk and generate returns. But these new products and strategies generate their own risks - for example, falling prey to data mining or extrapolation. But there are simple ways to invest that can produce superior investment outcomes with a fraction of the time and effort. This article focuses on investment techniques that are so simple, it is surprising how well they work - a phenomenon that Brett Arends of MarketWatch has called "dumb alpha."

A Simpler Way to Think about the Future

Let's assume you are in your thirties or forties. You need to finance your retirement with your savings. Creating a portfolio to build retirement wealth is no easy feat, given the fact that retirement may be 30-40 years in the future. A lot can happen in that time. Who can say what the next 30 years will look like?

Since it is impossible to predict which investments will do well during the next three decades, there are only two logical ways to invest. One is to keep all your savings in cash or the safest short-term bills and bonds. The problem with this approach is that you will find it impossible to keep pace with inflation once taxes and other expenses are taken into account.

The alternative is to invest an equal amount of your money in every asset class that's available in the marketplace. This makes sense, because you don't know how stocks will do compared with bonds or real estate investments, or how Apple (NASDAQ:[AAPL](#)) stock will do compared to Amazon (NASDAQ:[AMZN](#)). The simplest example of this naive equal-weighted approach would be a portfolio split 50/50 between stocks and bonds. Another approach would be to invest one-quarter of your assets in cash, one-quarter in bonds, one-quarter in equities, and one-quarter in precious metals. Similarly, instead of investing in a common stock index, such as the cap-weighted S&P 500 Index, you could evenly spread your precious funds across all 500 stocks of the index.

The Advantages of a Naive Asset Allocation

As it turns out, this way of investing tends to work extremely well in practice. In their 2009 article "*Optimal versus Naive Diversification: How Inefficient Is the 1/N Portfolio Strategy?*" Victor DeMiguel, Lorenzo Garappi, and Raman Uppal tested this naive asset allocation technique in 14 different cases across seven different asset classes and found that it consistently outperformed the traditional mean-variance optimization technique. None of the more sophisticated asset allocation techniques they used, including minimum-variance portfolios and Bayesian estimators, could systematically outperform naive diversification in terms of returns, risk-adjusted returns, or drawdown risks.

Unfortunately, naive asset allocation does not work all the time. Over the last several years, only one asset class has generated high returns: stocks. So, a naive asset allocation will not keep up with the more equity-concentrated portfolios during such periods. But it is interesting to note how well a naive approach works over an entire business cycle.

Practitioners should compare their portfolios with a naive asset allocation to check whether they really have a portfolio that delivers more than an equal-weighted portfolio. You can create a better ("more sophisticated") portfolio than the equal-weighted ("dumb") one, but it is surprisingly hard to do. As a check, you can create an equal-weighted portfolio from the assets or asset classes used in your current portfolio. Then test whether the current portfolio is superior to this equal-weighted benchmark over time in terms of returns, risks, and risk-adjusted returns. If that is the case, congratulations: You have a good portfolio. If not, you should think of ways to improve the performance of your existing portfolio.

It is also pretty clear why this dumb alpha works. Within stock markets, putting the same amount of money in every stock systematically prefers value and small-cap stocks over growth and large-cap stocks. These two effects conspire to create outperformance.

There is a second effect at play, however. After all, the value and small-cap effect cannot explain why a naive asset allocation also works in a multi-asset-class portfolio. The key reason for its strong showing is its robustness to forecasting errors. Most asset allocation models, like mean-variance optimization, are very sensitive to prediction errors. Unfortunately, even financial experts are terrible at forecasting, and one follows forecasts at one's peril. By explicitly assuming that you cannot predict future returns at all, an equal-weighted asset allocation is well suited for unexpected surprises in asset class returns - both positive and negative.

Since unexpected events happen time and again in financial markets, in the long run an equal-weighted asset allocation tends to catch up with more "sophisticated" asset allocation models whenever an event happens that the latter are unable to reflect. In other words, if a naive asset allocation outperforms a more sophisticated portfolio, it might provide a hint as to why this is the case. Are there too many risky assets in the sophisticated portfolio that directly or indirectly create increased stock market exposure? What are the implicit or explicit assumptions that led to the more sophisticated portfolio that have not materialized and have led to an underperformance relative to a less sophisticated naive asset allocation? In this sense, the naive asset allocation can act as a more practical alternative to a sophisticated portfolio, and as a more easily managed risk management tool.