



Sigma Summaries

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At the End of the Day, An Investor Only Has One Portfolio, Part II

The following question and answer discussion is the second in a series focusing on the determinants of investment returns. In the first interview with Ann J. Conrad, she discussed the role of asset allocation in the determination of investment returns. This article will explore the importance of equity allocation in maximizing the client's long-term after-tax total returns.

Ann, in addition to asset allocation, what other factors may have a major impact on investment returns?

The second factor that has a significant impact on investment return is the equity allocation.

What do you mean by equity allocation?

Many investors determine their equity allocation by segregating stocks into a matrix. While this matrix can take many different forms, a common approach is to divide stocks by investment style (growth vs. value), size (large, medium and small cap) and geographical location (domestic vs. international). In the example highlighted below, this approach creates as many as nine separate portfolios.

Using this approach, an investor will decide what percent of his overall portfolio should be represented by each style. For example, one may strive to have 70% in large cap, 20% mid cap, and 10% small cap. Moreover, of the 70% in large cap, one may divide the investment by placing 30% in growth, 30% in value, and 10% international. The mid cap and small cap positions can also be divided between growth, value and international. Or the investor may decide not to populate all the boxes or style possibilities. Only after these decisions are made are the individual investments selected to provide this exposure.

Are there reasons for thinking that the matrix approach may not be the best way to increase the odds of maximizing your client's returns within their tolerance for risk?

Yes, there are two. The first is the difficulty in determining what percent of a portfolio should be placed in each style. The second is certain assumptions that have led investors to this approach are flawed.

Why is it difficult to determine what percent of a portfolio should be invested in each style?

The process of investing includes evaluating the long-term outlook for an investment and determining what is already discounted in the current price. This seems to be difficult to do for a whole class of stocks. For example, over the last few years, we heard many investors comment on the attractiveness of small cap stocks after years of underperformance vs. larger cap stocks.

This was based on what appeared to be lower valuations for small cap stocks than for large cap stocks. However, what turned out to be incorrect were the assumed future growth rates. Clearly, it is quite difficult to analyze the expected growth rates of a whole class of stocks. In actuality, small cap stocks as a class reported earnings growth rates below expectations while larger caps reported growth rates above expectations. This caused the disparity in performance between small cap and large cap to persist much longer than many investors expected

Besides the difficulty of determining what percent should be invested in each style, you said you challenged some assumptions that have led investors to the matrix approach. What are these assumptions?

The assumptions that we would challenge are:

- small capitalization stocks outperform large capitalization stocks over time.
- "growth" and "value" styles both provide superior performance longer term but take turns going in and out of favor
- investing in foreign securities provides increased diversification and therefore, reduces risk.

Could you please elaborate? Let's first begin with small cap stocks.

Small cap stocks are often included in portfolios because supposedly they have outperformed large cap stocks over time. Studies are often based on data provided by Ibbotson & Associates, which has tracked returns by asset class since 1926. The problem with the data is there is no way to adjust for either "survivor or delisting bias". Secondly, limiting a portfolio to stocks below a certain market capitalization will require selling the "winner" because they have grown too large. We believe you should buy and hold stocks because they are attractive investments and not let market value influence investment policy.

What about growth versus value stocks?

There is also widespread belief that growth and value stocks provide similar superior returns over the long run yet they take turns in going in and out of favor. Since it is difficult to forecast when each style will provide superior performance, if one holds both, then an investor will realize superior returns over time.

The data to prove any of the above assumptions is sketchy at best. For example, Jeremy J. Siegel in his book, Stocks for the Long Run, provides some evidence that the value style among most capitalization sizes actually outperformed growth for the period 1963 to 1996. However, when the period 1975-1983 is taken out, growth far outdistances value for the rest of the time period. And of critical importance, the reason why value stocks did so well during the 1975-1983 period is that energy stocks experienced robust returns because of the rise in oil prices. Therefore, did "value stocks" really outperform growth stocks or did energy stocks outperform growth stocks?

More importantly, in our opinion, is the unfortunate fact that the terms "growth" and "value" have come into common usage in the first place. Think about franchise value. For a certain level of growth, there is an intrinsic value, which should properly reflect the appropriate discount for uncertainty. For every stock, the trick is to assess whether that stock is overpriced or underpriced relative to that growth. There could be value, in the sense of opportunity, among so-called "growth" stocks with very high P/Es, as well as among traditional low P/E, and low price-to-book "value" stocks. As a result, "growth" investors may be missing great investment opportunities by overlooking slower growing companies. Similarly, "value" investors may be forfeiting returns by refusing to buy a stock once it passes a predetermined P/E ratio.

The matrix approach also includes foreign investing. You said you challenged the assumption that international stocks provide diversification and therefore, reduce risk. Why?

Historically, the purpose of investing in foreign securities was to reduce risk and to not eliminate two thirds of the world's market capitalization from an investor's investment opportunity set. Recent evidence suggests, however, that foreign investing may not produce as much diversification as it did historically. A much higher correlation now exists between various world stocks markets because industry fundamentals are moving in harmony around the world. A world with global competition, mobility of goods, services and factors of production ensures that rates of return for similar products or service will converge. In such an efficient world, stock markets become increasingly correlated to the extent industry representation (weighting) are similar. Therefore, the synchronization of the various stock markets around the world suggests that one can achieve full-diversification by investing in stocks traded on U.S. exchanges. A portfolio strategy based on the fiscal policy actions and/or location at the national level may not be fruitful. A more advantageous strategy may be to focus on the global economic environment and attempt to identify which sectors will benefit from that environment. The companies chosen for investment will not be determined by which country they are from but by their respective competitive position. In 1999, many foreign mutual funds outperformed the S & P 500 index. Such outperforming funds provided this performance not necessarily because they were foreign; rather, it was more likely because they were heavily invested in technology and telecommunications securities.

Well, if matrix style investing is fraught with pitfalls, what methodology do you use?

We take a distinctly different approach. The title of this newsletter "at the end of the day, you only have one portfolio" is a major clue to our approach. At Sigma, we create one equity portfolio for each investor. We begin by selecting an appropriate benchmark that is representative of the broad market. At the present time, our benchmark is the S&P 500 Index. We then over / under-weight sectors relative to the benchmark weights based on secular trends in the economy and the client's risk-return profile. Our next step is to select the most attractive securities within each industry. As we research suitable investments, we are less concerned whether it is large cap or small, domestic or international, considered value versus growth. Our focus is whether a company under investigation meets all of the criteria deemed to be essential for its purchase in client portfolios. Once again, each security needs to be evaluated on its own fundamental characteristics and valuation. Finally, the risk levels for each portfolio can be varied by the degree to which sectors, industries, and individual securities are under and over weighted. An aggressive portfolio may have heavier weights in the fastest growing sectors and stocks. Greater sector concentration will generate the opportunity to earn higher returns in exchange for higher volatility, i.e., less diversification.

Interestingly, our portfolio is comprised of stocks considered to be both growth and value stocks. We have stocks of varying sizes and many derive a high percentage of their earnings overseas. We are not averse to purchasing securities based in foreign countries if they have the most competitive franchise in their business. However, these statistical measurements are incidental to the construction of each portfolio.

To summarize:

Equity allocation is the second most important determinant of investment returns.

The best way to allocate equity is to determine market weight of each sector and over-weight the most attractive sectors and under-weight the least attractive.

Investors should focus on identifying the correct global sectors and industry groups, such as technology and telecommunications, to maximize returns.

Each security needs to be evaluated on its own fundamental characteristics and valuation, irrespective on whether it is large cap or small, domestic or international, value or growth.

Voila!

Sector Market Cap Weights

Sector	Sigma* as of 3/21/00	S&P 500 as of 3/17/00
Basic Materials	2.15%	2.48%
Capital Goods	6.32%	7.79%
Communication Services	6.57%	7.72%
Consumer Cyclical	9.08%	8.16%
Consumer Staples	9.27%	9.77%
Energy	3.56%	5.32%
Financial	14.90%	12.66%
Health Care	10.92%	9.09%
Technology	37.94%	34.09%
Transportation	0.55%	0.60%
Utilities	0.00%	2.33%

* represents Sigma's aggregate core holdings

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