Thinking Outside the “Style” Box

A popular tool for segmenting stocks, mutual funds and money managers is the investment style box. The style box was introduced by Morningstar in 1992. It was originally designed to help the individual investor analyze the investment characteristics of mutual funds. Use of the style box has expanded over the years, and it is now popular with the big hitters in the investment world—pension consultants, institutional investors, hedge funds, etc. Unfortunately, the style box has become an investment jail cell for many managers by strictly limiting the types of stocks the manager can consider for investment.

The style box is a nine-square grid that classifies securities by size along the vertical axis and by value and growth characteristics along the horizontal axis.

Equity Style Box

	Value	Blend	Growth
Large Cap			
Mid Cap			
Small Cap			

Within this framework, managers are hired to represent a particular style box and expected to invest only in stocks with characteristics fitting that box. Typically, pension consultants and advisors use the grid to monitor the manager for any movements from one box to another (style drift). In theory, the style box helps the investor construct a diversified portfolio that reduces overall volatility and, hopefully, increases return.

Boxing Out Returns

Unfortunately, the style box approach has many problems, and there is now evidence to suggest that keeping managers constrained to a specific style box actually hurts investment performance and offers very few diversification benefits.

The problems begin with the definition of investment “style.” Opponents of the style box contend that it is better described as a “characteristic grid.” The term, “style,” refers to a system, method or technique for selecting stocks. For instance, momentum, contrarian, fundamental, bottom-up and top-down are some examples of investment styles. Investment characteristics are measurable dimensions of the portfolio, usually defined by market capitalization (size) and value/growth (valuation) measures, such as price-to-earnings and price-to-book value. It is possible for a manager to stay true to his investment style while drifting across the characteristic grid. However, this drift is frequently criticized by clients who expect the manager to stay neatly in his assigned box. It is for this reason that the style box approach has been called characteristic-constrained investing.

In the spring 2001 edition of the *Journal of Portfolio Management*, Richard Ennis and Michael Sebastian published an article that challenged the conventional style box concept. It claimed that hiring a manager for each box is costly and highly inefficient. Ennis and Sebastian argued that managers should be free to roam the entire stock universe in search of opportunities and should not be constrained to one box.

In a 2002 University of Maryland working paper, Russ Wermers confirmed the Ennis-Sebastian proposition. Wermers studied the relationship of characteristic drift to investment performance. He found that an inverse relationship exists between the two. Managers with the greatest characteristic drift outperformed those managers with the least drift by 3% per year on average! Wermers concluded that a successful equity investment style produces both superior returns and characteristic drift over time.

Boxing In Risks

In addition to better performance, the other assumed benefit of using the style box approach is greater diversification and reduced portfolio risk achieved by allocating assets across the various style boxes. However, it appears that, not only does the style box approach not help performance, it also does not reduce risk. In a series of articles published in the *Journal of Investment Consulting* on "characteristic-constrained investing," Craig Callahan and Tom Howard provide evidence that indicates diversification across the style grid produced returns that are just as volatile as a random collection of managers selected without regard to the style box in which they fall. Also, the style box diversified portfolio is only slightly less volatile than a portfolio consisting of four different managers from the same style box.

The reason that style box diversification produces few risk-controlling benefits is that the style or characteristic boxes are not distinct asset classes. Traditional asset classes are cash, stocks, bonds, real estate and so forth. They are compositionally unique with low correlation between the different classes, and the composition of a class is stable over time—an asset does not change classes over time.

The style box fails on all three criteria. First, the various boxes are not unique. The information services (Morningstar, S&P, Russell, and Wilshire) have different methods of defining growth and value. Some services actually define growth as the lack of value characteristics. On some occasions, certain stocks are not classified as either growth or value. It is also possible for a stock to be included in both the growth and value categories.

In addition, Callaghan and Howard's analysis of historical return correlations indicates a consistently high correlation (80% or higher) between the various market capitalizations and growth or value specific indices. In general, a low correlation among asset classes means that as the classes are added to the portfolio, overall portfolio risk is reduced. If the average correlation among asset classes is higher than the average correlation already in the portfolio, their contribution to risk reduction will be minimal.

Finally, if style boxes were unique asset classes, they would not easily move from one asset class to another. The reality is that stocks frequently move between the style box classifications. S&P re-categorizes stocks twice a year. Over the period from June 1998 to June 2005, S&P found that an average of 10% of the stocks changed classifications every six months!

The double composition, high correlations and unstable membership make capturing the potential benefit of style box diversification very difficult if not completely impossible.

Building a Better Box

As part of their research, Callaghan and Howard investigated the development of the investment style box. Their work shows that the system developed with no empirical basis. It evolved out of convenience. As people adopted the tool, they made assumptions critical to its validity and believed them to be true without empirical support.

Morningstar, the developer of the investment style box, offers no evidence that the tool enhances performance or controls risk. Just the opposite, Morningstar has written that a strict style box centered strategy can be detrimental. It is clear that Morningstar intended the style box to be a simple tool for helping investors better understand the mutual funds in which they are investing.

The CornerCap Style

As managers, we have never been comfortable having general style labels applied to our investment philosophy. Our quantative research model, Fundametrics, screens for stocks that exhibit both growth and value characteristics. Over the years, there have been times when a style box analysis indicates that we are a pure value manager, and at other times we fit the blended description. In 1999, at the height of the technology bubble, we were clearly labeled as deep value managers. Today, our portfolios exhibit more growth characteristics than during the bubble, and, as a result, we have shifted more toward the blended label. However, during this time, our investment approach has not changed.

If we did attempt to stay firmly within one style box, not only would we be forced to violate our investment discipline, but we would also become nothing more than a closet index fund. Therefore, we prefer to stay focused on critically monitoring our research results, making improvements when appropriate and maintaining our investment discipline, even if our approach temporarily falls out of sync with a particular style box.