

Buying the Markets, Beta before Alpha

Investors don't need to be experts at modern portfolio theory to understand one of the fundamental ideas about investment risk, as articulated in the capital asset pricing model or CAPM. Risk, according to CAPM, can be decomposed into two elements: systemic or market risk, and non-systemic or security-specific risk. Each is a potential source of return for investors. In the jargon of portfolio theory, the first is known as beta, the second as alpha, after the Greek letters used in the mathematical expression of the capital asset pricing model.

Systemic risk, or beta, is the risk that all investors bear by being invested in a particular market without regard to individual investments in the market. Market risk has its source in the factors and events that affect valuations across the entire market. An investor in the high-yield corporate bond market, for example, may see his or her investments increase in value if robust economic prospects reduce the credit risk premium for such bonds. Or alternately, U.S. stock market values may decrease across the board if investor sentiment grows cautious and P/E multiples begin to decline. These rising or falling market tides lift or sink all participants in the market. There's no escaping them, short of not being in the market. For being in the market and accepting the market risk, investors are rewarded with a market risk premium, and each market has its characteristic long-term risk premium. The premium is an average incremental return above what one would earn from risk-free government securities.

Non-systemic risk, or alpha, is the risk associated with investing in an individual company or security. It's the risk associated with company specific conditions or circumstances: the risk, for example, that a company's new product line will not be successful, or that its management will be ineffective, or that its CFO will not be honest in the conduct of company business and financial disclosures. Investors who loan money to the company or buy its stock accept these risks and many others specific to the company. By accepting these company-specific risks, investors hope to be rewarded with returns better than the average market return for debt or equity investments.

At one time, an investor might have had success in achieving above average returns through researching well-managed companies with good products and financial performance. Today, such companies are well recognized. Investing in them is no guarantee of a superior return, since everyone in the market recognizes them for what they are, and their value is priced into the cost of making an investment.

Since the market is relatively efficient at recognizing good companies, it is difficult to discover an opportunity the market hasn't already discovered. As a consequence it is difficult to beat the market. This is the efficient market argument, and its consequence for investors is that they should not bother to go searching for alpha—for sources of above average returns. The efficient market has eliminated them. Furthermore, those money managers who claim to be able to beat the market have probably just been lucky. If you

entrust them with your money, the law of averages will likely bring the manager's lucky streak to an end, and your money will suffer below market returns.

Readers of the *Asset Allocation Advisor* know that we do not subscribe to the efficient market hypothesis and for two reasons. First, information is not a given, and the process of recognizing what counts as information cannot be reduced to a rules-based activity. What is noise to someone is meaningfully patterned data to another. The data some will see as relevant, others will not. Second, markets are not always governed by the rational analysis of fundamentals. Behavioral finance factors influence investors and markets.

If capital markets are not efficient, then it should be possible to beat the market and to generate alpha-based returns. But here's the rub: although we believe it is possible to add value through superior security selection and/or a perspicacious understanding of the market and investor psychology, we don't know how to identify the superior alpha investors. Investment geniuses like Peter Lynch may exist, but we have no way of identifying them in advance, and as numerous academic studies have shown, it takes many years of success before we can conclude that an investor has real skill and has not just been lucky.

So even though capital markets are not efficient, and even though investment geniuses may exist, we believe investors are better served pursuing beta than alpha. In other words, investors will do better maximizing returns by optimizing their asset allocation – by buying the right mix of markets - than by chasing alpha-based returns by trying to find the next Peter Lynch to be their money manager.

How do you buy the markets? We believe investors should use passively managed mutual funds or exchanged-traded funds (ETFs) that aim at replicating the performance of an index. Such funds are not actively managed, in other words, managers are not trying to beat an index but just trying to match it. Fund costs are typically very low—in many cases between 0.10% and 0.25%. Options for the equity categories included in the seventeen asset classes modeled by the *Asset Allocation Advisor* are provided in the following. Options for real estate, fixed-income, and other categories will be provided in an upcoming article. Investors are advised to obtain and review the prospectus for any fund before making an investment. Investors are reminded that the mention of a mutual fund or ETF herein is not a solicitation or recommendation to buy. Caveat lector—let the reader beware.

1. U.S. large-capitalization stocks

Investors have several options for buying the market of domestic large-capitalization stocks as many mutual fund families offer a fund with the objective of mirroring the large-cap market. The standard index for such funds is the S&P 500, which matches the historical data we track on U.S. large-cap stocks. The Vanguard 500 Index fund (symbol

VFINX^{*}) is the oldest and largest of these mutual funds. It also has one of the lowest expense ratios at either 0.15% or 0.07% depending on the share class. The Fidelity Spartan 500 Index fund (symbol FSMKX) has contractually committed to an expense ratio of no more than 0.10% and charges 0.07% on its large investor shares. Schwab offers an S&P 500 Index fund (symbol SWPIX) with expenses ranging from 0.35% to 0.10% depending on the class.

An investor can also buy the S&P 500 by purchasing SPDRs (Standard and Poor Depository Receipts or Spiders, symbol SPY), the oldest and most widely traded ETF. SPDRs are bought and sold just like shares of stock. Each share represents an interest in a trust that is managed to reflect the composition and weighting of the actual S&P 500 index. As one would expect, SPDRs track the index almost identically except for the costs of managing the trust, which amount to just under 0.10%. The trust does offer a dividend reinvestment plan, although accessibility to this may depend on the broker or custodian holding the shares for the investor. Other ETFs that track the S&P 500 include Barclay's iShares S&P 500 Index fund (symbol IVV). The Vanguard Large-Cap ETF (symbol VV), an ETF version of the Vanguard Large-Cap Fund, tracks a broader large-cap universe, the MSCI US Prime Market 750 Index.

2. U.S. small-capitalization stocks

Investors have a choice of mutual funds and ETFs for buying the market of domestic small-capitalization stocks. Unlike the large-cap market, however, the choices are fewer but somewhat more varied as no one small-cap index has the same wide acceptance as the S&P 500 index for large-cap. Small-cap indices include the Russell 2000 and the S&P 600. The Russell 2000 captures the value of the 2000 smallest company stocks in the Russell 3000 universe. The S&P 600 is a fiat index of small-capitalization stocks chosen by the Standard & Poor's index committee. Broader indices that cover both the mid-cap and small-cap market ("smid-cap") include the Russell 2500 and the Dow Jones Wilshire 4500. These indices cover all stocks except for the largest 500 in their universe. The Dow Jones Wilshire 4500 specifically excludes the stocks in the S&P 500.

Among the mutual fund investment options are the American Beacon Small Cap Index Fund (symbol ASCIX for institutional investors only), whose objective is to match performance of the Russell 2000 index, and the Dreyfus Smallcap Stock Index Fund (symbol DISSX), whose objective is to match the S&P 600 index. Charles Schwab offers a Small-Cap Index Fund (symbol SWSMX) whose objective is to track the total return of the Schwab Small-Cap Index of the second-largest 1,000 U.S. companies. Vanguard offers a Small-Cap Index Fund (symbol NAESX) whose objective is to track the performance of the MSCI U.S. Small Cap 1750 Index. Dimensional Fund Advisors offers

* Mutual funds typically come in more than one class, and each class has its own trading symbol. The symbols provided here are for the most widely accessible class, usually available to individual investors with a modest initial investment. Investors in a position to make a larger initial investment, typically \$100,000 or more, may have access to a class of shares with lower costs. Some funds, as noted, are available only to institutional investors.

both a Small Cap (symbol DFSTX) and a Micro Cap fund (symbol DFSCX). Neither fund is benchmarked to an index, but both funds are invested on a market capitalization weighted basis in all of the domestic stocks (excluding REITs) meeting the relevant market-cap size. The Micro Cap fund is noteworthy since its return is the basis for the small-cap stock returns reported by Ibbotson/Morningstar in its *Stocks, Bonds, Bills and Inflation* market results reports and annual yearbook. Both funds are available only to institutional investors.

ETFs that track small-cap indices include:

- iShares S&P SmallCap 600 Index fund (symbol IJR),
- iShares Russell 2000 Index fund (symbol IWM),
- SPDR DJ Wilshire Small Cap fund (symbol DSC),
- Vanguard's Small-Cap ETF (symbol VB).

ETFs that track mid-cap indices include:

- iShares S&P MidCap 400 Index fund (symbol IJH),
- iShares Russell Midcap Index fund (symbol IWR),
- SPDR DJ Wilshire MidCap fund (symbol EMM),
- S&P MidCap 400 (symbol MDY).

International Stocks

Although investors have a wide range of choices in mutual funds that invest in international stocks, very few of the funds are indexed. The same is true of international stock ETFs. As a result, the options for investing in most international markets on a low-cost, beta-only basis are considerably more limited than for the U. S. market.

3. UK Stocks

No mutual funds indexed to the UK stock market are currently available to U.S. investors through U.S. firms. M&G Investments, the UK firm that launched in 1931 the first equivalent of a mutual fund in Britain (called a unit trust or, in its more modern version, an OEIC, an open ended investment company), offers an Index Tracker Fund targeted to the FTSE All-Share index. Prudential Assurance offers a UK Index Tracker Fund targeted to the FTSE 100 index. And the UK branch of Fidelity offers a passively managed index fund, the Moneybuilder UK Index Fund, which attempts to replicate the FTSE All-Share index. None of these funds, however, is available to U. S. investors.

The only indexed investment option the *Advisor* knows of for buying the UK stock market within the U.S. is the iShares MSCI United Kingdom Index ETF (symbol EWU) managed by Barclays Global Investors. This exchange-traded fund aims at tracking the MSCI UK Index and is one of several country specific index funds offered by iShares.

4. Euro area stocks

The only indexed fund or ETF currently available to US investors for investing in the stock market of the euro area is State Street Global Advisors DJ Euro STOXX 50 exchange-traded fund (symbol FEZ). This ETF attempts to match the return and risk performance of the Dow Jones Euro STOXX 50 Index. This index is a blue chip index of the 50 largest stocks (by free float market capitalization) traded on the major exchanges of the euro area countries.

Several other indexed fund or ETF alternatives exist for investing in the broader European market. Vanguard offers a mutual fund, the Vanguard European Stock Index Fund (symbol VEURX), which targets the performance of the MSCI Europe Index. This fund is also available as an ETF (symbol VGK). State Street Global Advisors offers an exchange-traded fund that targets the performance of the broader Dow Jones STOXX 50 Index (symbol FEU). Barclays Global Investors offers an iShare ETF that targets the S&P Europe 350 index (symbol IEV). All of these alternatives, however, mix euro area companies with UK, Scandinavian, and Swiss companies.

Investors can also invest on an indexed basis in the stock markets of individual major western European stock markets through iShares ETFs managed by Barclays Global Investors.

5. Japan stocks

Investors buying the Japanese equity market have several choices of indexed exchange-traded funds including iShares MSCI Japan Index Fund (symbol EWJ), iShares S&P/TOPIX 150 Index Fund (symbol ITF), and SPDR Russell/Nomura PRIME Japan ETF (symbol JPP). Each of the funds attempts to track the index referenced in its name. The Russell/Nomura PRIME Index is the broadest-based of the three indices. This index includes the 1,000 largest stocks measured by float-adjusted market capitalization in the Russell/Nomura Total Market Index, which itself includes approximately 98% of the investable equity market in Japan. The Russell/Nomura PRIME Index includes well over 85% of the market capitalization of the Japan equity market. The next broadest index is the MSCI index which tracks approximately 85% of the free float-adjusted equity market. The S&P/TOPIX 150 index is an index sponsored jointly by Standard & Poor's and the Tokyo Stock Exchange. It includes 150 leading companies representing each of the sectors of Japanese economy.

Vanguard offers an indexed mutual fund that provides exposure to the Japan equity market. The Vanguard Pacific Stock Index Fund (symbol VPACX), however, is not exclusively a Japan equity fund, as indicated by its name. It also includes equities from Australia, New Zealand, Hong Kong, and Singapore, although Japanese equities made up more than 72% of the fund as of 31 October 2008. The fund is indexed to the MSCI Pacific Index, which in aggregate includes approximately 85% of the free float-adjusted

equity markets of the five constituent countries. It is also available in an ETF (symbol VPL)

6. Emerging Market Stocks

With developing countries now accounting for the majority of global economic growth, many funds have been created to enable investors to capitalize on the growth of emerging market economies and their companies. U. S. investors have the choice of nearly 300 mutual or exchange-traded funds specializing in emerging market equities. Nearly all of these funds are actively managed. Investors do have a choice among several emerging market indexed funds, however.

Vanguard manages an emerging market stock fund that attempts to track the returns on the MSCI emerging market index. As of 31 October 2008, the MSCI Emerging Market Index was comprised of nearly 800 stocks from 25 countries with the largest weights attributable to stocks from China, Brazil, South Korea, Taiwan, Russia, South Africa, India, and Mexico which combined accounted for over 80% of the market capitalization of the index. Investors may invest in this fund through Vanguard Emerging Markets Stock Index mutual fund (symbol VEIEX) or through a corresponding exchanged-traded fund (symbol VWO).

Barclays Global Investors sponsors the iShares MSCI Emerging Markets ETF (symbol EEM). This exchange-traded fund attempts to track the MSCI Emerging Market Index. Unlike the Vanguard Emerging market fund which uses a full replication strategy (in other words it buys all of the companies in the index), the iShares MSCI Emerging Markets ETF uses a sampling strategy to replicate the index performance.

State Street Global Advisors manages the SPDR S&P Emerging Markets ETF (symbol GMM). This exchange-traded fund attempts to track the total return performance of the S&P/Citigroup BMI Emerging Markets Index. As of 31 December 2007, this index included 2,377 companies from 26 emerging market countries. According to the ETF prospectus, State Street Global Advisors does not attempt to own every stock in the index but uses a sampling strategy to replicate index performance.

In addition to these broad market funds, investors have the option of investing in any one of several more targeted emerging market index funds. Indexed funds are available for the Latin American market, and for the combined emerging markets of Brazil, Russia, India and China (usually identified as BRIC), in addition to separate indexed funds for China, Brazil, Chile, Malaysia, Mexico, South Africa, South Korea, and Taiwan.

Investors buying emerging market equity markets should use caution in picking their fund or funds and be aware that costs vary more widely among emerging market index funds than among other funds, and that the use of sampling strategies rather than full replication strategies may lead some funds to have a larger tracking error than others relative to the target index.