Diversification has long been recognized as essential in reducing investment risk. Modern portfolio theory teaches us that employing a number of asset classes with varying degrees of correlation can diversify away unsystematic risk and, consequently, dampen overall portfolio volatility. By having exposure to low or negatively correlated asset classes, an investor will, in theory, always have some winners and some losers in a portfolio.

Indeed, asset allocation is one of the primary values an advisor offers to clients. Advisors understand the importance of appropriately selecting and weighting asset classes for clients to receive a portfolio with certain agreed-upon risk and return characteristics. Conversely, these agreed-upon risk and return characteristics help determine a suitable asset allocation for a client. Nevertheless, all of this work toward proper diversification relies on the assumption that expected risk and return is based on the occurrence of a normal market environment. Clients are presented with allocations that reflect assumptions of normal market conditions; yet clients are concerned about market conditions that are anything but normal.

To manage client concerns and guide them through a long-term investment strategy, it is important to understand potential deviations that asset classes might experience in different economic environments. Asset classes can behave differently in various phases of the economic cycle. And, although the relationship between asset class behavior and the economy is not cut-and-dried, certain trends can be used as guidelines when building an all-weather portfolio.

The key factors that define different economic environments are real gross domestic product (GDP) growth, inflation, interest rates, and the unemployment rate. Four primary environments are addressed here: recession, stagflation, inflationary growth, and ideal growth. Figure 1 shows the relationships of these different factors and the environments they create.

**Recession.** A recession is technically defined as two consecutive quarters of negative gross domestic product (GDP) growth; however, it generally lasts six to 18 months and is accompanied by high unemployment and low inflation. Recessions most often are caused by a significant event in the economy, such as the burst of the housing bubble that caused the 2007–2009 recession, or the savings and loan collapse of the early 1990s. The stock market crash and a string of bank failures in the 1930s caused the Great Depression, the most notable recession in U.S. history. During these periods of slow or negative growth, a combination of increased government spending and an intentional lowering of interest rates may be used to help stimulate the economy. As the economy begins to recover from a recession, it enters an expansionary period where GDP is steadily growing but inflation stays relatively low. This was the case in the post-war era of the 1940s, as shown in figure 2.

**Stagflation.** Stagflation occurs as inflation and unemployment begin to rise, but the industrial growth rate remains low. The most prominent period of stagflation in the United States occurred through the 1970s, as
fiscal and monetary policies were used to increase the money supply but production remained low. Inflation rates were north of 10 percent throughout much of the decade, with GDP remaining low to negative. High unemployment and high inflation create an environment where there is less money to be spent and the value of that money has decreased.

**Inflationary growth.** During stagflation, Keynesian theory suggests that fiscal and monetary policy is necessary to influence demand, and therefore, economic growth. By increasing spending or implementing tax breaks, money flows into the economy and increases demand, which in turn raises GDP. Inflationary growth occurs when inflation rates stay higher than normal but steady, and GDP begins normalizing, to somewhere around 4 percent. At this point the economy is stabilizing, and inflation will come back to healthy levels.

**Ideal growth.** As inflation rates begin to come back to normal and GDP begins to recover, the economy enters into ideal growth. Here, the economy has just the right balance. Inflation is generally low at less than 3 percent, and GDP is consistently around 4 percent. This phase is the most desirable of the economic cycle. If the trend of rising growth continues, the economy overheats, which leads to inflationary growth. Demand is outpacing supply, and prices are beginning to rise. Inflation moves upward of 5 percent. At this point the government may raise interest rates to cool off the economy, which in turn reduces spending. As spending decreases, production slows, unemployment rises, and the economy moves through the natural cycle and begins to show signs of a recession.

As the economy ebbs and flows through these cycles, the return and volatility patterns of asset classes also ebb and flow. So, can a particular allocation withstand these cycles and, if so, how should it be structured? Does diversification remain as the answer to mitigate downside risk regardless of the economic environment? To answer these questions, it is important to understand the behavior of the various asset classes.

**Asset Classes are Cyclical**

Every asset is cyclical, in that it will lead the economy, track it, or lag it. As such, forecasting an asset class’s performance from one environment to a different environment can be dangerous. Leading assets already will be in the beginning stages of a bull market when a recession is ending. Bond yields, for example, will begin to rise ahead of an equity bull market. Meanwhile, lagging assets will still have some downtime left before they start to recover. We see these cycles as the economy oscillates between expansion and contraction, bull and bear, and monetary easing and tightening. While U.S. large-cap equities thrive during rising growth and low inflation, commodities typically underperform because a lack of inflationary pressure keeps the prices of real goods low. By the same token, falling growth and rising inflation provides the perfect environment for commodities and emerging markets to outperform while a weakening dollar and high unemployment cause the domestic market to fall behind. Bull markets tend to produce positive returns in most diversified portfolios, and bear markets pull back and offer flat or negative returns over time.

Because the market frequently shifts between these highs and lows, a portfolio should be developed to weather the various cycles and still produce attractive returns. Because it is nearly impossible to predict when the next cycle is coming, it can be a challenge to build a portfolio that can withstand what’s to come. Often the current economic environment isn’t identified until it’s too late to make a beneficial switch in the portfolio. While one allocation may perform well in a low-inflation environment, it may drastically underperform during periods of high inflation. That then becomes the challenge. When clients want to buy or sell based on the current environment, they may be too late to the game to benefit; the change may be detrimental. Again, diversification over the long term still the right choice, or does reacting to economic cycles better mitigate downside risk?

**Systematic vs. Unsystematic Risk**

In either approach, the building blocks of portfolio construction should be composed of some combination of risk
Factors and asset classes. Every asset class carries risk that can be broken into systematic (the risk inherent in the market) and unsystematic (the security-specific risk unique to that security). Although unsystematic risk can essentially be diversified away by holding an array of securities in the portfolio, systematic risk, such as inflation, interest rates, and commodity prices, affects the whole market and cannot be avoided through diversification.

Forward-looking capital market assumptions can be developed for each asset class’s systematic risk and corresponding return by addressing the long-term market conditions around these factors. For example, a base case set of capital market assumptions is created assuming a normal market environment with constant GDP growth and moderate inflation. Then it is determined how each area of the market, i.e., asset class, should perform under these normal conditions from a return and risk perspective. From this base case set of assumptions, a different set of assumptions can be developed for each economic environment as a deviation from the base case set. In other words, by considering how the key factors in each market environment fluctuate, a set of adjusted forward-looking risk and return assumptions for each of the different scenarios can be created. For example, in a stagflationary environment, the three-year return on U.S. large-cap equities would be reduced 890 bps, from 7.7 percent to –1.2 percent. These assumptions then can be used in the institutional process of building portfolios.

As mentioned, reacting to economic cycles is a risky game, because each asset class has a different and often unpredictable reaction to an economic swing. Many times, identifying the direction of the market, and therefore the asset class(es) headed for an upswing, is difficult and untimely. More than half of the economic indicators published by The Conference Board are lagging or coincident, which means that by the time the current cycle is recognized, it is generally too late to make a constructive allocation change. So what about using leading indicators to prepare for a downturn? A common guideline is that three consecutive declines in three months signals a recession; however, this guideline has sent at least one false signal in six of the eight expansions that came before February 2005. For this reason, many economists now prefer to see a sharp, prolonged decline in the Leading Economic Index, accompanied by declines in all 10 components. Because there is so much downturn required before a meaningful assessment can be made, using leading indicators to make portfolio changes based on a forecasted upswing or downswing almost can guarantee a spot behind the eight ball. While tracking these indicators certainly can suggest the future of the economy, making small indicator-based shifts within a well-diversified portfolio will better position clients for the long-term ups and downs.

Return Augmenters or Risk Moderators

Most asset classes can be categorized as either return augmenters or risk moderators. While return augmenters offer the highest returns, they also typically carry the highest standard deviation. Examples include emerging markets, international small-cap, and U.S. large-cap. Risk moderators are those asset classes that offer protection with single-digit standard deviation, which generally equates to the lowest returns. Examples include municipal bonds, U.S. aggregate bonds, and managed futures. Maintaining the appropriate balance in the portfolio is key because protection in the down markets should not come at the expense of missing out on participating in up markets. This may result in small modifications within the overall portfolio along the way; however, these modifications should be short-term and in response to an anticipated economic shift.

For instance, the best-performing asset classes during a recession tend to be municipal bonds, U.S. aggregate bonds, and real assets (commodities). If unemployment is rising, interest rates are falling, and consumer spending is slowing, this signals a good time to shift a portion of the equity allocation to high-quality bonds and real assets such as gold (a commodity that performs well in a recession). Assuming a 60-percent U.S. large-cap/40-percent aggregate bond portfolio has a standard deviation of 12.4 percent and an expected three-year return of –7.8 percent in a recessionary environment, a shift of 10 percent of the equity allocation to commodities and 10 percent to municipal bonds lowers the standard deviation to 9.1 percent and increases the return to –5.2 percent. A higher allocation to high-quality fixed income, or managed futures, would produce a more significant impact; however, this example illustrates that even small, timely changes can have a noticeable improvement on the portfolio even in the worst scenario. On the other hand, consider the same 60/40 portfolio as a starting point in an inflationary growth environment. As inflation and interest rates are rising, fixed income will begin to suffer and a shift back to equities with things such as emerging markets and private equity sprinkled in will create an ideal allocation to benefit from this hot environment. The 60/40 portfolio would be expected to have a standard deviation of 12.4 percent with a three-year return of 1.7 percent. By moving 10 percent from fixed income to emerging market equities, and another 10 percent to private equity, the standard deviation has increased slightly to 16.2 percent, but the return has increased more dramatically to 5.3 percent. These two examples are simple, and the majority of the equity allocation in both remained in U.S. large-cap. When that allocation is spread out among several other subclasses, the results become more positive.
Figure 3 and table 1 show a diversified portfolio that uses a balance of the return augmenters and risk moderators plus forward-looking assumptions with the expected three- and five-year performance in each environment. It is also compared to a standard 60/40 allocation.

As shown in figure 3, the diversified portfolio outperforms the standard allocation in all instances. It is not surprising to see that both portfolios perform similarly in an ideal growth environment. As the name suggests, this is the most desirable scenario and almost all asset classes are performing well. Ideal growth is also generally the shortest-lasting environment, because it tends to be a pass-through period while the economy is shifting. Because the forward-looking assumptions for each scenario normalize over time, the shorter-term returns are higher and drop slightly as the economy normalizes. The same is true in a recession. In times of extreme downturns, almost all asset classes will drag, though the diversified portfolio shows slightly better returns in both time frames. It would be most beneficial during extreme downturns to slightly overweight the overall portfolio in fixed income and other protectors. The most prominent differences can be seen in inflationary growth and stagflation. Over a three-year stagflation period, returns go from negative to flat, and even more notably, gain 350 bps during inflationary growth. The long-term standard deviation also reduces quite noticeably, from 12.4 percent to 11.1 percent. Because of the long-term nature of assumptions, standard deviation is expected to be constant over time. It also should be understood that the return and standard deviation assumptions assume a normal recovery and smoothing out of each scenario over time.

**Strategic Approach to Investing**

After examining the performance of different asset classes in each economic scenario, how the return augmenters and risk moderators interact, and how to gauge an allocation change based on an expected shift in the economy, it is clear that a strategic approach to investing is best because no one knows which asset classes will be the winners in the future. Being cognizant of how the market behaves under various economic conditions can provide insight as to how different asset classes might react, and will help to better position the portfolio to thrive across all market conditions.

True diversification involves a broad range of asset classes, sectors, and investment vehicles. It includes the major asset classes—equities, fixed income, and cash—and also delivers into various subclasses, precious metals, currencies, commodities, and so on. To take full advantage of the benefits of correlation and a risk-return balance, a portfolio should be diversified over as many different sources of return as makes sense for the client. Value is added through a wide range of investments with low correlation, because as some are aggressive in up markets, others protect in down markets. Low correlation achieved through diversification provides balance. For example, while the S&P 500 fell 57 percent between late 2007 and early 2009, Treasury bonds gained 21 percent and short-term investments produced small, but positive returns.2

As 2008 and 2009 asset class correlations moved closer to 1.0, diversification advantages were eradicated. Such events can instill fear in clients and make them question whether a diversified portfolio provides any benefit at all. However, in such times it is important to focus on the long-term horizon and remember that periods of high correlation and low return are an expected phase of an economic cycle. Periods of high turbulence in the markets are followed by stabilization and then recovery, and significant gains can be earned by owning a broad portfolio in those

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times. The S&P 500 was up more than 26 percent in 2009, its greatest gain since 2003, after being down 37 percent in 2008. As important as it is to provide portfolio protection for clients, it is equally important to ensure they do not miss out these market gains. The purpose of diversification is to mitigate these risks and take advantage of these opportunities over the long term.  

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**Endnotes**

1 See http://www.investopedia.com/university/conferenceboard/conferenceboard2.asp#axzz1tSSqlJKQ.
3 See www.standardandpoors.com.