The importance of a well-diversified portfolio

Diversification had been the hallmark of intelligent, long-term investing for decades. Then came the global financial crisis and the seeming failure of diversification to protect portfolios, along with the perceived depreciation of all asset classes at once. It was understandable or perhaps even essential to question whether the old rules about having a well-diversified portfolio still apply. The answer? As much as ever.

The value of diversification can be seen most clearly through a long lens.

Historically, a simple stock-bond breakdown in a portfolio may have sufficed. Stocks and bonds did not move in lockstep and were typically “uncorrelated,” meaning if one was underperforming, the other likely was outperforming. Until everything changed. The U.S. stock market peaked in October 2007, when the Dow Jones was over 14,000. Over the next year, the market would continue its steep decline, and by the time the market bottomed in March of 2009, the Dow was down by roughly 6,600—a 50% loss in a scant 17 months. Although a safe haven compared to stocks, investment-grade bond performance dipped as well over roughly the same time period, with total return going from 3.00% to 0.12%, according to the U.S. Barclays Aggregate Index.

The crisis taught us that during times of severe market stress, stocks and bonds could, in fact, be correlated. Rather than dispense with diversification altogether, however, we sought to revisit and redefine what it truly meant to be well diversified.

Today, a well-diversified portfolio is not one that merely comprises a slapdash mix of stocks and bonds, but is one that is diversified within those asset classes at a refined, nuanced level, such as across economic sectors and geographic regions, as well as perhaps nontraditional assets.

CONTINUED
### Asset class performance can vary greatly from year to year

| Year | MSCI EM | MSCI EAFE | Russell 1000 Growth | Russell 1000 Value | Russell 2000 Growth | Russell 2000 Value | Barclays Agg | Barclays EM | Barclays EAFE | Barclays ILBs | Barclays Agg | Barclays EM | Barclays EAFE | Barclays ILBs | Barclays Agg | Barclays EM | Barclays EAFE | Barclays ILBs | Barclays Agg | Barclays EM | Barclays EAFE | Barclays ILBs | Barclays Agg | Barclays EM | Barclays EAFE | Barclays ILBs |
|------|---------|-----------|---------------------|-------------------|-------------------|-------------------|--------------|------------|-------------|----------------|--------------|------------|-------------|-------------|----------------|------------|-------------|-------------|-------------|--------|------------|-------------|-------------|--------|------------|-------------|-------------|
| 2005 | 34.0%   | 32.2%     | 16.5%               | 7.1%              | 20.3%            | 23.5%            | 11.2%        | 14.3%      | 34.0%       | 19.0%          | 2.4%         | 4.7%       | 9.1%        | 6.9%        | 5.6%           | 10.5%      | 37.0%       | 21.0%       | 20.0%       | 8.0%   | 4.0%       | 21.0%       | 20.0%       |
| 2006 | 32.2%   | 30.5%     | 14.3%               | 7.9%              | 19.0%            | 22.4%            | 12.6%        | 15.3%      | 36.5%       | 15.3%          | 3.0%         | 5.8%       | 8.5%        | 6.8%        | 5.3%           | 11.1%      | 33.5%       | 22.5%       | 21.0%       | 7.8%   | 5.8%       | 22.5%       | 21.0%       |
| 2007 | 30.5%   | 26.3%     | 12.6%               | 7.7%              | 18.8%            | 21.2%            | 11.1%        | 13.5%      | 34.0%       | 16.0%          | 3.4%         | 5.3%       | 8.5%        | 6.4%        | 4.7%           | 12.0%      | 31.5%       | 22.0%       | 20.0%       | 7.0%   | 4.7%       | 22.0%       | 20.0%       |
| 2008 | 28.3%   | 12.4%     | 11.4%               | 7.7%              | 16.0%            | 21.7%            | 10.9%        | 12.5%      | 32.5%       | 15.0%          | 3.2%         | 5.7%       | 8.7%        | 6.2%        | 4.6%           | 12.0%      | 29.5%       | 22.0%       | 19.0%       | 6.9%   | 4.7%       | 22.0%       | 19.0%       |
| 2009 | 26.3%   | 12.6%     | 10.9%               | 7.5%              | 15.3%            | 20.0%            | 10.5%        | 12.5%      | 31.0%       | 14.0%          | 3.0%         | 5.6%       | 8.7%        | 6.1%        | 4.7%           | 11.5%      | 28.0%       | 21.5%       | 18.0%       | 6.3%   | 4.7%       | 21.5%       | 18.0%       |
| 2010 | 24.4%   | 10.9%     | 10.4%               | 7.2%              | 14.0%            | 19.7%            | 10.1%        | 11.5%      | 30.0%       | 13.0%          | 2.8%         | 5.3%       | 8.4%        | 5.9%        | 4.5%           | 10.5%      | 26.5%       | 21.0%       | 17.0%       | 5.9%   | 4.5%       | 21.0%       | 17.0%       |
| 2011 | 21.5%   | 11.4%     | 10.1%               | 7.0%              | 13.5%            | 19.1%            | 10.3%        | 11.5%      | 30.0%       | 13.0%          | 2.6%         | 5.2%       | 8.2%        | 5.7%        | 4.3%           | 10.5%      | 25.0%       | 20.5%       | 16.0%       | 5.6%   | 4.3%       | 20.5%       | 16.0%       |
| 2012 | 18.6%   | 10.5%     | 9.7%                | 6.8%              | 13.0%            | 18.6%            | 10.0%        | 11.0%      | 29.5%       | 12.5%          | 2.4%         | 4.9%       | 7.9%        | 5.5%        | 4.1%           | 10.0%      | 24.0%       | 20.0%       | 15.0%       | 5.1%   | 4.1%       | 20.0%       | 15.0%       |
| 2013 | 15.7%   | 9.3%      | 9.2%                | 6.5%              | 12.5%            | 18.0%            | 9.5%         | 10.5%      | 29.0%       | 12.0%          | 2.2%         | 4.7%       | 7.7%        | 5.3%        | 3.9%           | 9.9%       | 23.0%       | 19.5%       | 14.0%       | 4.6%   | 3.9%       | 19.5%       | 14.0%       |
| 2014 | 12.8%   | 8.1%      | 8.7%                | 6.2%              | 11.5%            | 17.5%            | 9.0%         | 10.0%      | 28.5%       | 11.5%          | 2.0%         | 4.5%       | 7.5%        | 5.1%        | 3.5%           | 9.5%       | 22.0%       | 19.0%       | 13.0%       | 4.0%   | 3.5%       | 19.0%       | 13.0%       |

Source: Ibbotson Associates

The “Diversified Portfolio” portfolio assumes the following weights: 15% S&P 500; 25% Russell Midcap; 21% MSCI World ex USA; 39% Barclays U.S. Aggregate Bond. The chart depicts the total returns of various unmanaged market indices representing different asset classes and investment styles (growth/value). It is not possible to invest directly in an index. The following indices serve as proxies for the asset classes: Russell 1000 growth Index and Russell 1000 Value Index (large-cap growth & value stocks); Russell 2000 growth Index and Russell 2000 Value Index (small-cap growth & value stocks); MSCI EAFE® (Net) Index (developed international stock markets); MSCI Emerging Markets (Net) Index (emerging stock markets); Barclays Capital U.S. Aggregate Bond Index (investment-grade taxable bonds); and Barclays Capital World Government ILB Index (hedged) (inflation-linked bonds, or ILBs).

You can never fully escape volatility and the potential for capital loss—that is, unless you’re able to predict the future, knowing when to buy and sell in advance. If that is the case, read no more. But if you are like the rest of us, smart ways to buffer portfolios against the slings and arrows of market upheaval are to properly diversify and maintain an investment discipline. These essential contributors to investing success are, however, often negatively influenced by two basic truths: Markets are unpredictable and investors can sometimes be their own worst enemies.

### The unpredictability of the markets

As the physicist Niels Bohr said, “Prediction is very difficult, especially if it’s about the future.” This is especially true of the capital markets. For instance, when Barron’s surveyed 47 top economists and market strategists on their 2014 outlook, all but one predicted interest rates would rise; one predicted they would remain flat. All were wrong, as historically low rates fell even lower. Then there was the oil price freefall of 2014, which few if any market observers saw coming.

Why are markets so hard to predict? Well, there’s a complex interaction of a continuous river of information, such as earnings, economic growth, central bank policy, investor sentiment, etc., that can be simultaneously ambiguous and contradictory. Complicating this data jet stream is a range of sociopolitical events that may be difficult, even impossible, to anticipate, such as currency devaluations, military conflicts, and changes in government, the ultimate impact of which cannot always be immediately discerned.

©2016 Wilmington Trust Corporation and its affiliates. All rights reserved.
Risk & reward

Optimizing a portfolio to most efficiently serve an investor’s needs is an exercise in complex mathematics and investment theory that has been refined over many years. However, while volatility can be reduced through diversification, even a well-diversified portfolio cannot eliminate volatility entirely.

Whatever the endeavor, risk is an inextricable partner of reward. Investments are no different. Reward cannot be realized without taking on risk. Asset allocation in no way alters this fundamental truth; it simply represents a more intelligent way to manage this natural order.

If you look at Figure 1, you can see just how much of a challenge it is to anticipate which asset class (and subasset class) will come out on top from year to year. Certain asset classes are not correlated, meaning they do not react the same way to a common set of economic and market factors. For example, as previously noted, stocks and bonds are traditionally not correlated, i.e., one has tended to perform well when the other did not. Okay, so why not just have a portfolio with a portion that’s stocks and a portion that’s bonds, right?

The asset classes in your portfolio should reflect your objectives, risk tolerance, and investment time horizon. If a portfolio comprises purely large-cap stocks and government bonds, it could be considered a concentrated portfolio, not a well-diversified one. Compared to a diversified portfolio, a concentrated one may bring higher returns for a certain period of time, but it will typically do so with greater volatility. The diversified portfolio may provide a better outcome, even given comparable long-term returns, because of less volatility (see Figure 2).

Here’s why: Smaller losses during market downturns may allow for greater compounding of wealth (more assets stay in the portfolio, able to continue growing).

A well-diversified portfolio is one that accounts for the wide performance swings within asset classes. Diversification will enable the capture of some of the upside of asset classes that are performing well in a certain year and keep one from being too fully invested in those that are not performing well. As we saw in Figure 1, there is a great disparity in performance among large-, mid-, and small-cap stocks (as shown by the various

![Figure 2: Volatility diminishes returns](source: WTIA)

A simple illustration may help to explain the drag that negative returns can have on a portfolio. Consider two portfolios valued at $100,000: Portfolio 1 earns 10% in year one and 10% in year two, while Portfolio 2 earns 40% in the year one and –20% in the year two. Each portfolio experienced a similar simple average annual return (10%), but the impact of a negative return readily shows up in actual ending portfolio value and the portfolios’ respective compounded average annual return (“annualized”). In the case of Portfolio 1, its value at the end of year two is $121,000, with a 10% compounded annual return, while Portfolio 2’s value at the end of year two is $112,000, with a 5.8% compounded annual return.

CONTINUED
known as “prospect theory,” which holds that individuals are more likely to be influenced by short-term volatility—i.e., assigning more value to shorter-term gains and losses—as opposed to sitting tight and keeping their eyes on the (longer-term) prize.

To illustrate this point, Figure 3 overlays annual market returns and the net new cash flow into stock mutual funds (i.e., the amount individuals are investing net of withdrawals).

There’s no way to predict with any degree of certainty whether an asset or subasset class will be an outperformer or underperformer for any particular year. Referring to Figure 1, in 2010, for example, small-cap stocks were tops; in 2012, they were six out of the nine on the chart and, in 2013, they were back on top. Look at the white boxes, however, which reflect the diversified portfolio, and its lower volatility over time.

The predictability of human emotions

If market unpredictability isn’t enough to vex investors, their own decision making can also undermine their long-term investment success. And why do investors behave in ways counter to their best interests and historical experience? The answer lies in our innate emotions and biases. Nobel Prize winner and behavioral finance expert Daniel Kahneman developed what is
higher irrespective of valuations (think the “dot-com” bubble that burst in 2000).

Alternatively, during a bear market or a market crash, the fear of losing money can result in a “flight” impulse that may lead to selling investments at precisely the worst time. The most recent example of this was the massive selling of stock funds during the credit crisis that began in 2008. Investors who “cut and ran” subjected their wealth to purchasing power risks and the opportunity of being overinvested in cash. Also, not only did they sell at an inopportune time, many remained out of the market waiting for “the right time” to redeploy assets and failed to participate in the price recovery that began in March of 2009. Trying to time when to buy and sell creates two opportunities to get it wrong.

Humans also possess inherent biases that can impact decision making and lead to expensive errors in investment judgment, including:

- Confirmation bias, the tendency to listen to only the news or facts that support our conclusions or beliefs
- Selective memory, a propensity to forget past mistakes, or recast them in a decidedly more positive light
- Negativity bias, placing greater emphasis on bad news than good news

**A well-diversified portfolio can reduce volatility**

The goal of a well-diversified portfolio is to seek the highest possible return for a given level of investment risk in a portfolio. Consider the example of the shop owner who decides to diversify his business by selling umbrellas and sun block. He understands that the sales of each
As these illustrations suggest, diversification works by moderating some of the negative returns during adverse markets, though not necessarily eliminating them. Minimizing volatility for a given level of return is important to long-term investment success. To better understand why this is true, you need to appreciate the relationship between volatility and market performance. Volatility tends to decline as the stock market rises and increase as the market falls. As volatility increases, compound returns decrease. The greater the volatility, therefore, the larger the drop in the compound return.

**Diversification may also enhance returns**

It may be counterintuitive to suggest that portfolio returns may be enhanced even as risk is reduced, yet historical experience suggests it is possible. Compare the diversified and stock-only portfolios in Figure 6, which details the individual calendar year returns of each hypothetical portfolio. As the results indicate, between the years 2000 and 2014, the stock-only portfolio outperformed the diversified portfolio 53% of the time (8 out of 15 years), while underperforming 47% of the time (7 out of 15 years).

However, the extent of drawdown (loss in portfolio value) in the stock-only portfolio was significantly greater than in the diversified portfolio. Consequently, as Figure 7 shows, the outperformance by the diversified portfolio was 60 percent. On a cumulative basis, from January 2000–December 2014, the diversified portfolio was up 147%, while the stock-only portfolio was up 86% (on a compounded return basis)—a difference of almost 61 percentage points.

Reducing exposure to risk will, at times, reduce a portfolio’s ability to maximize gains, especially in a strongly positive market. This opportunity cost can be viewed as a safeguard from the deleterious impact of imperfect and unknowable information about the future. Ultimately, however, the ability of an asset allocation to capture a proportion of the gains with lower overall volatility can, on a long-term basis, position investors to...
outperform a less diversified, more volatile portfolio. The potential to enhance gains can be further bolstered by rebalancing, selling those assets that have risen in value while buying those assets that have declined in value (more on this to follow).

**How to build a well-diversified portfolio**

As with any endeavor, the prospects for success improve with a plan. An Investment Policy Statement should serve as a roadmap, with a clearly defined goal and a carefully designed route based on enduring portfolio construction principles.

The asset allocation plan also provides an ongoing discipline to maintain a steady hand amid volatile markets or asset class bubbles. While asset allocation won’t cure investors of their innate human biases or emotions, it should serve as a framework that promotes discipline, preventing them from wreaking havoc on a portfolio.

As mentioned earlier, asset allocation is an exercise in combining different assets with varying risk and return drivers (and thus not fully correlated to one another), in an effort to lower volatility, while mitigating the sacrifice to portfolio return. By considering the returns, risks, and the correlations among asset classes, an investment plan—as codified in a client’s customized Investment Policy Statement—seeks to develop a portfolio that targets an optimum balance of return and risk specific to his or her investment objectives.

Building an asset allocation strategy requires first an understanding of the return and risk characteristics of each asset class and its correlation to other asset classes. Using this information, these asset classes are blended together, typically via mathematical calculations, to optimize the blend of asset classes in pursuit of the maximum potential return at a defined risk level.

---

**Slow and steady...**

A diversified portfolio has had less volatile returns long term, and outperformed a concentrated portfolio, even at the 2008 market bottom.

The diversified portfolio comprises 15% S&P 500, 25% Russell Midcap, 21% MSCI World ex U.S., 39% Barclays U.S. Aggregate Bond and returned 6.25% on an annualized basis between January 1, 2000, and September 30, 2015. The undiversified (equity only) portfolio comprises 100% S&P 500 and returned 4.27% over the same period.

Diversification does not ensure a profit or guarantee against a loss. Past performance is no guarantee of future results.

Source: Bloomberg, WTIA
Traditionally, portfolios have been diversified both across and within asset classes. Stock portfolios, for example, were typically allocated by the standard measures of market capitalization and/or style (growth, value). In recent years, however, we have found that the ebbs and flows of the economic cycles will not be sufficiently captured by these means. Instead, we believe it is important to diversify using the economic drivers of asset classes. One way to accomplish this is by diversifying among economic sectors. Utilities, technology, and healthcare, for example, vary in their degree of sensitivity to economic cycles, and can thereby offer the potential for more precisely tuning risk exposures and correlation.

**Rebalancing**

Portfolio allocations are not static since different asset classes will perform differently over time. These shifts in asset class weightings may result in an increased risk level for a portfolio. For instance, a portfolio of 60% stocks and 40% bonds, after a sharp run-up in the stock market, may be transformed into a portfolio that is 70% stocks and 30% bonds. With the added stock weight, the portfolio is now holding a greater risk exposure, a level perhaps higher than what the investor is comfortable assuming. As a consequence, it’s important to periodically (typically, annually) rebalance a portfolio to bring it back in line with the original asset allocation. Also, moving assets from higher performers to lower performers helps ensure investors “Buy low, sell high.”

**Conclusion**

Though this discussion has focused on basic asset classes (e.g., stocks and bonds) to explore key asset allocation concepts, investors should consider a wide range of asset classes to build their portfolios, including U.S. and international stocks, investment-grade and speculative-grade (“high yield”) bonds, international bonds, and alternative assets, including, where appropriate, private market solutions.

Your investment advisor can discuss these with you at greater length, as you work together to create the comprehensive Investment Policy Statement and well-diversified, customized portfolio targeted to your long-term investment objectives.
Wilmington Trust® is a registered service mark. Wilmington Trust Corporation is a wholly owned subsidiary of M&T Bank Corporation. Investment management and fiduciary services are provided by Wilmington Trust Company, operating in Delaware only; Wilmington Trust, N.A., a national bank; and Manufacturers and Traders Trust Company (M&T Bank), member FDIC. Wilmington Trust Investment Advisers, Inc., a subsidiary of M&T Bank, is a SEC-registered investment adviser providing investment management services to Wilmington Trust and M&T affiliates and clients. Brokerage services, mutual funds services and other securities are offered by M&T Securities, Inc., a registered broker/dealer, wholly owned subsidiary of M&T Bank, and member of the FINRA and SIPC. Wilmington Funds are entities separate and apart from Wilmington Trust, M&T Bank, and M&T Securities.

The information in this commentary has been obtained from sources believed to be reliable, but its accuracy and completeness are not guaranteed. The opinions, estimates and projections constitute the judgment of Wilmington Trust and are subject to change without notice. This commentary is for information purposes only and is not intended as an offer, recommendation or solicitation for the sale of any financial product or service or as a determination that any investment strategy is suitable for a specific investor. Investors should seek financial advice regarding the suitability of any investment strategy based on the investor’s objectives, financial situation and particular needs. The investments or investment strategies discussed herein may not be suitable for every investor. There is no assurance that any investment strategy will be successful. Past performance is no guarantee of future results.

Investment products are not insured by the FDIC or any other governmental agency, are not deposits of or other obligations of or guaranteed by Wilmington Trust, M&T, or any other bank or entity, and are subject to risks, including a possible loss of the principal amount invested. Some investment products may be available only to certain “qualified investors”—that is, investors who meet certain income and/or investable assets thresholds. Investing involves risk and you may incur a profit or a loss.

**Standard deviation** is a measure of volatility and represents the variability of individual returns around the mean, or average annual, return. A higher standard deviation indicates more return volatility. This measure serves as a collective, quantitative estimate of risks present in an asset class or investment. Some risks may be underrepresented by this measure.

**Maximum drawdown** is the maximum loss (compounded, not annualized) that the portfolio incurred during any sub-period—the largest available negative return resulting from consecutive periods over the full timeframe under examination. Conceptually, this is the biggest “peak to trough” loss. The result is typically negative, but a maximum drawdown of zero indicates that there were no losses over that timeframe.

Any positioning information provided does not include all positions that were taken in client accounts and may not be representative of current positioning. It should not be assumed that the positions described are or will be profitable or that positions taken in the future will be profitable.

Indices are not available for direct investment. Investment in a security or strategy designed to replicate the performance of an index will incur expenses, such as management fees and transaction costs, which would reduce returns.

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.