LPL RESEARCH

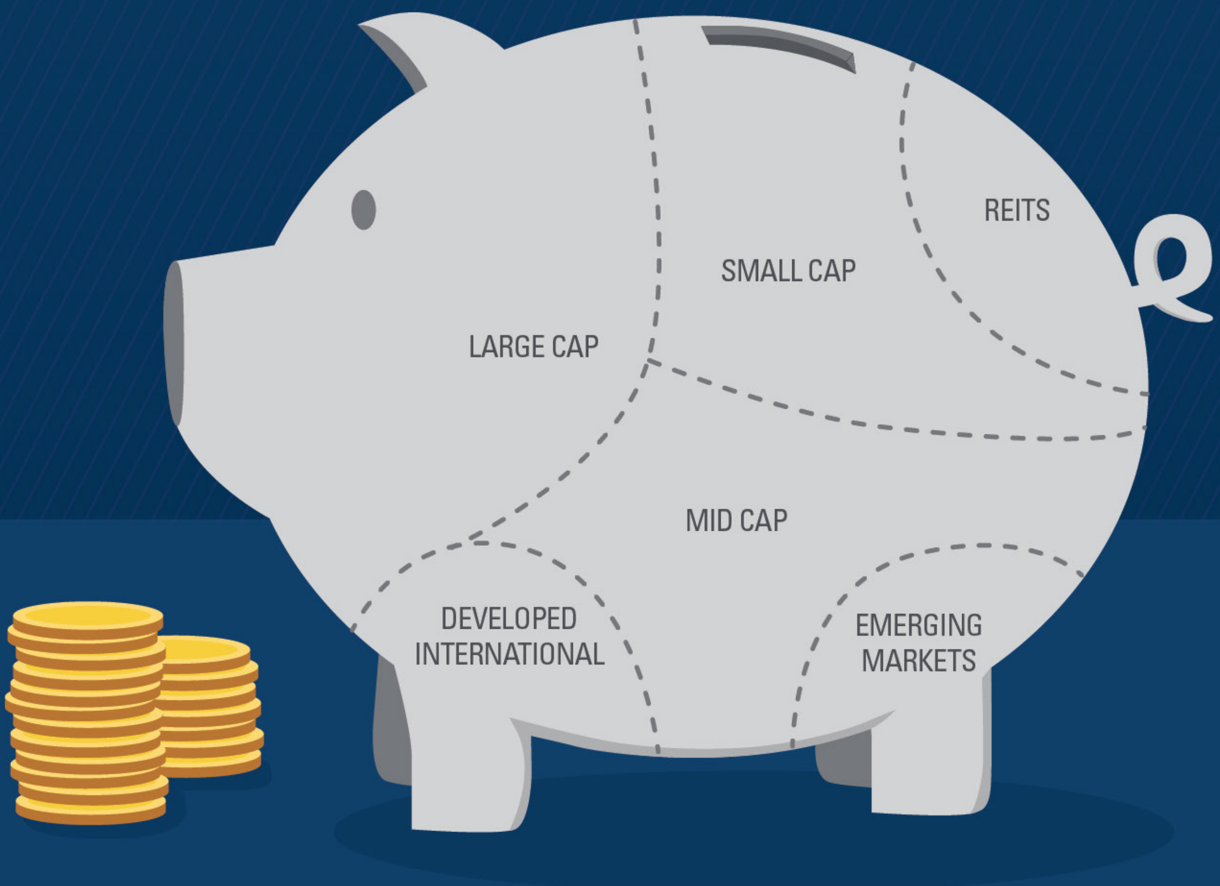
PRIVATE CLIENT THOUGHT LEADERSHIP

INSTITUTIONAL INSIGHTS

August 2016

DIVERSIFICATION

MAY BE POISED FOR A COMEBACK



LPL Financial

During the first half of 2016, diversification has provided a slight benefit for investors, as a diversified portfolio of equities* has outperformed large cap U.S. equities, represented by the S&P 500 Index. However, in four of the previous five years (the only exception being 2012), this same diversified portfolio of equities underperformed the S&P 500 and investors were effectively penalized for their diversification. The historical pattern of diversification has fluctuated between a benefit for several years and a penalty for several years. The pattern we've seen so far in 2016 may continue—potentially giving investors a diversification benefit once again. Looking at historical analysis and keeping in mind our long-term goals, we continue to believe in diversification.

ATYPICAL SECTOR LEADERSHIP

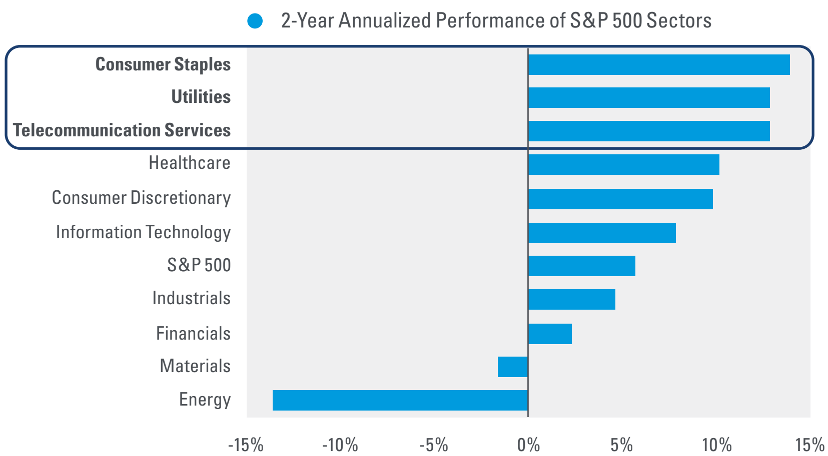
Similar to the recent shortcomings of diversification between equity asset classes, diversification within certain equity asset classes has also been challenging as of late. Active managers, portfolio managers who deviate from their investment benchmark in order to outperform that benchmark, have been challenged by atypical sector leadership. Sectors that are not typically relied on for growth and outsized returns have been outperforming lately. As of June 30, 2016, the utilities sector has outperformed the S&P 500 over the last five years. Over the last two years, the consumer staples, utilities, and telecom sectors have outperformed all other sectors of the S&P 500 [Figure 1]. These three sectors are labeled as defensive sectors, as they are not as dependent on the overall economic cycle as others. Yet, this defense has proven to be good offense over recent years.

There is no guarantee that a diversified portfolio will enhance overall returns or outperform a non-diversified portfolio. Diversification does not ensure against market risk.

* "Diversified portfolio of equities" here is defined as the following indexes: 30% S&P 500, 20% Russell 2000, 20% Russell Midcap, 10% MSCI EAFE Index, 10.0% FTSE Nareit Equity REITs, and 10.0% MSCI Emerging Markets (Net). The mix is rebalanced annually and will be referred to as "diversified equity" throughout this piece.

The results of this analysis are hypothetical and provided for illustrative purposes only. Had different indexes been used the results would also have varied.

1 ATYPICAL SECTORS HAVE LED THE WAY DUE TO THE CONTINUAL DECLINE IN GLOBAL INTEREST RATES



Source: LPL Research, Zephyr 08/15/16

Data are as of 06/30/16.

This is far from normal; over the last 25 years, telecom has produced the lowest return among S&P 500 sectors, with utilities coming in sixth out of 10. More cyclical, growth-oriented sectors have historically been a better way to invest for long-term investors. This type of atypical sector leadership, driven partially by the steady decline in interest rates, has been a headwind for active managers. Active managers have generally been underweight these sectors, which have become richly valued by investors seeking both safety and yield in a low interest rate environment. As interest rates continued to decline, these sectors have benefited, creating another impediment for active management and diversification.

THE RISK OF NOT DIVERSIFYING

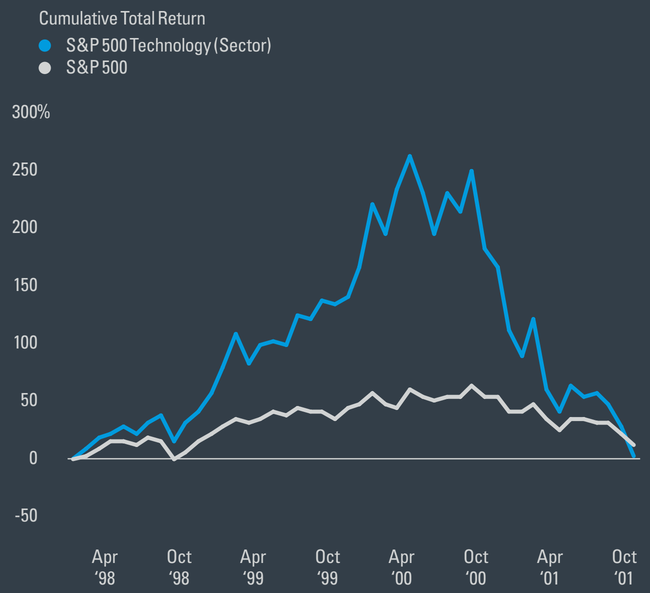
Those frustrated with diversification failures may be looking for alternative methods of portfolio allocation, with some opting to invest in a more concentrated manner. However, we need only to look at history to understand the dangers of investing in a standout asset class that has led the way for years. To name just two recent examples, we can look at tech in the late 1990s and housing in the mid-2000s. With hindsight being 20/20, investors would have loved to ride those sectors to the top and cash out. In practice, however, very few investors had the foresight (or luck) to invest heavily in those sectors at the beginning of their booms, and even fewer divested before the bust. All too often, investors end up getting little of the boom and a lot of the bust.

Investing solely in information technology (represented by the S&P 500 Information Technology Sector Index) beginning in 1998 would have netted over 200% cumulative excess returns by the end of March 2000, relative to the S&P 500. However, just 18 months later, at the end of September 2001, that sector lost all of those relative gains and more. It underperformed the S&P 500 by -9.1% cumulatively over the entire period (January 1, 1998 through September 30, 2001), while experiencing over two times the volatility (measured by standard deviation) of the S&P 500 [Figure 2].

Homebuilders in the U.S. during the early to mid-2000s offered a similar cautionary tale. After four-and-a-half years of outperformance beginning in 2001—to a peak of 375% cumulative outperformance versus the S&P 500 on July 31, 2005—the sub-industry erased all of those gains in the subsequent two-and-a-half years. As of November 30, 2007, despite the incredible run of outperformance, the S&P 500 Homebuilding sub-index had actually underperformed the S&P 500 over the full time period (January 1, 2001 through November 30, 2007), while subjecting investors to over two times the volatility of the broad S&P 500 [Figure 3].

A standard deviation is a mathematical term that explains how likely an event is to deviate from the average.

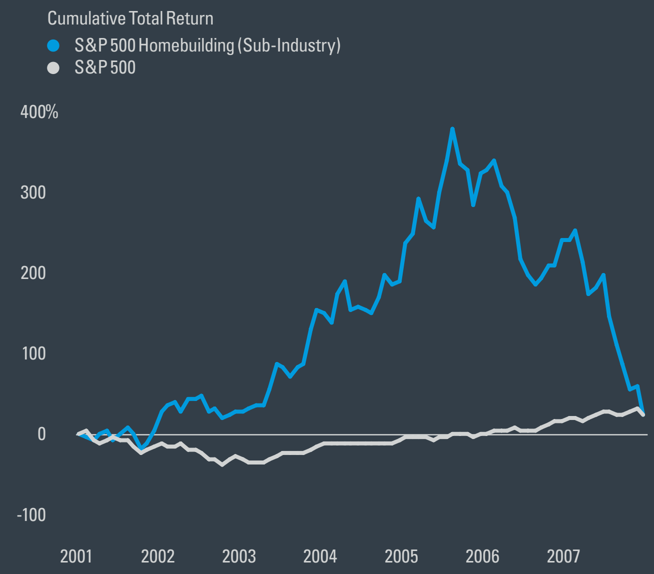
2 TECH'S PERFORMANCE IN THE LATE 1990s IS A CAUTIONARY TALE IN CHASING HOT ASSET CLASSES



Source: LPL Research, Zephyr 08/15/16

Data analysis period is from 01/01/98–09/30/01.

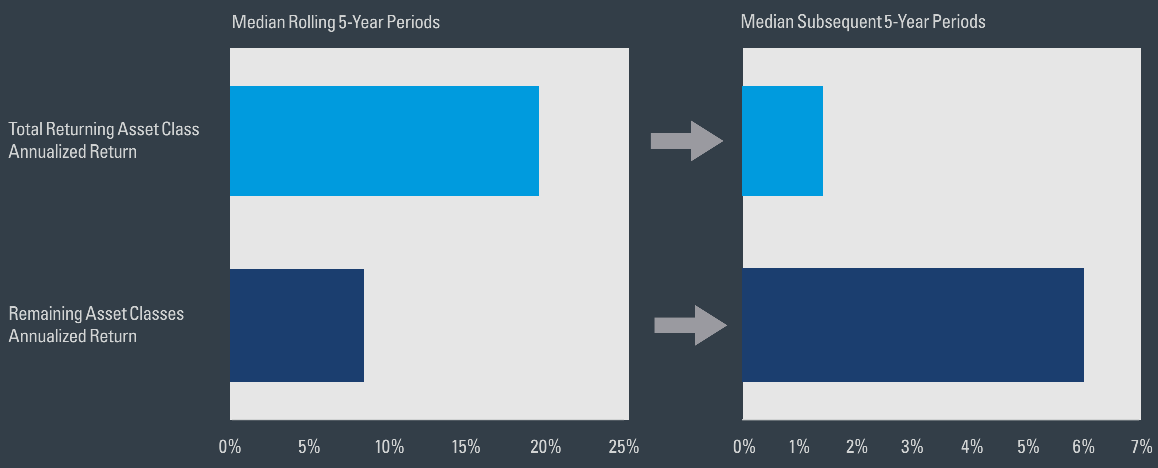
3 HOMEBUILDER'S PERFORMANCE IN THE 2000s IS ANOTHER REMINDER OF THE DANGERS OF INVESTING NARROWLY



Source: LPL Research, Zephyr 08/15/16

Data analysis period is from 02/01/01–11/31/07.

4 THE TOP EQUITY ASSET CLASS OVER FIVE-YEAR ROLLING PERIODS HISTORICALLY FALTERS OVER THE SUBSEQUENT FIVE YEARS



Source: LPL Research, Zephyr 08/15/16

Data analysis period is from 01/01/88–06/30/16.

Indexes used: S&P 500, Russell 2000, Russell Midcap, MSCI EAFE Index, FTSE Nareit Equity REITs, and MSCI Emerging Markets (Net).

Over the last five years, U.S. large cap companies have outperformed virtually all other segments of the market, including U.S. small and mid cap equities, emerging market equities, and developed foreign equities, leading investors to question the merits of diversifying their equity exposure. Historically, however, the equity asset class that has performed best over the previous five years has experienced lackluster returns during the next five [Figure 4].

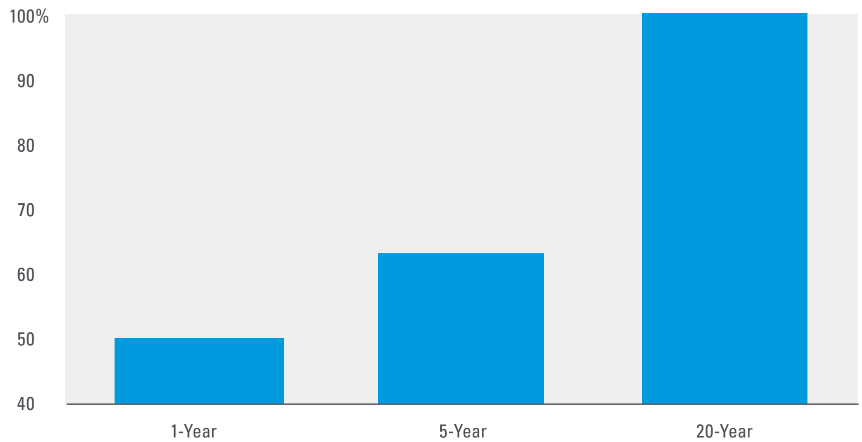
As of June 30, 2016, large cap U.S. equities have been the second strongest performer over the last five years when compared to the other equity asset classes listed above (the FTSE Nareit Equity REITs Index just surpassed the S&P 500 during June 2016). Given the phenomenon shown in Figure 4, history would indicate that above-average caution is warranted when it comes to investing solely in domestic large cap stocks, or any narrow segment of the equity landscape.

AN EXERCISE IN HUMILITY

We don't know with certainty which equity asset class will outperform, or stumble, in any upcoming year. Given that, diversification is the long-term prudent choice. In addition, one thing we do know is that the sector or trend that has worked and performed well over the previous five years has historically not worked over the next five years [Figure 4]. Thus, choosing a specific asset class to invest in by looking at what has worked in the recent past has not been a successful solution. We can view diversification as an exercise in humility, therefore, as an unknowable future argues for caution.

Diversification has historically added more value the longer investors remain diversified. For example, diversification may provide a benefit (outperformance versus the S&P 500) just over 50% of the time on a 1-year rolling basis, but that number improves to 63% over 5-year rolling periods and 100% over rolling 20-year periods. In other words, diversification has always worked over a 20-year time frame [Figure 5].

5 **PERCENTAGE OF ROLLING PERIODS WHERE DIVERSIFIED EQUITY HAS OUTPERFORMED LARGE CAPS**



Source: LPL Research, Zephyr 08/15/16

Data analyzed is monthly periodicity from 1/1/88–06/30/16. Number of samples for each rolling period is 1-year: 331, 5-year: 283, and 20-year: 103 monthly samples.

Diversified equity index consists of: 30% S&P 500, 20% Russell 2000, 20% Russell Midcap, 10% MSCI EAFE Index, 10.0% FTSE Nareit Equity REITs and 10.0% MSCI Emerging Markets (Net), rebalanced annually. Large caps are represented by the S&P 500.

VOLATILITY IS BACK IN THE MIX

Volatility may also be a determining factor of diversification's success. Our analysis found that following long stretches of volatility in the S&P 500, diversification has historically fared better, relative to those periods after stretches of low volatility. The average daily volatility, measured by the VIX[1] reading thus far in 2016 (through June 30, 2016) is 18.0, the highest of any calendar year since 2011 (averaging 24.2), after bottoming in 2014 (averaging 14.2) and steadily climbing since. In the aftermath of increased volatility, risky assets tend to perform well, as their prices had become overly depressed due to overselling. This phenomenon could be another tailwind for diversified equity relative to large cap stocks, furthering the case for diversification. Our previous work has shown that diversification tends to perform best after the VIX has averaged above 24 for a two-year period, so volatility will need to remain elevated for some time before that bar is cleared.

IT'S A GLOBAL WORLD

Investing solely in domestic equities may seem attractive on a lookback basis, but doing so ignores nearly half of the equity opportunity set globally. Non-U.S. equities make up 46% of the global investable universe.[2]

[1] VIX is the Chicago Board Options Exchange (CBOE) Volatility Index, which shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 Index options.

[2] Based on market capitalization of MSCI U.S. Index and MSCI World ex-U.S. Index, as of 06/30/16.

As demonstrated earlier, global diversification has worked best over a long-term (20-year) horizon and prudent investors should not exclude the broader investable universe.

To exclude non-U.S. equities could lead investors to potentially miss out on many opportunities for not only return enhancement but risk-return optimization, as foreign equity markets are less than perfectly correlated with domestic markets.

Even if investors prefer domestic equity exposure, adding developed international and even emerging markets exposure can help diversify not just geographically speaking, but also from a sector perspective within the global economy. The U.S. has largely transitioned from a manufacturing- to service-based economy, and investing solely in domestic equities may overemphasize the IT services, software, and biotechnology portions of the global economy. Adding international equities can give investors exposure to industries that have largely moved to other countries, such as manufacturing of many durable goods.

BENCHMARKING DIVERSIFIED PORTFOLIOS

In LPL Research, we believe in the power of diversification and the benefits of investing in a global world. Our strategic asset allocation and strategic investment models generally have allocations across developed foreign and emerging market equities. We believe that more diversified benchmarks, with exposure outside of domestic equities, more accurately represent the global world in which we are trying to invest for our clients. We plan to begin adding diversified benchmarks to our portfolios in the coming months in order to have a more appropriate framework to measure our investment results.

CONCLUSION

We believe in diversification as a prudent investing approach to a long-term portfolio. Although diversification has penalized investors more often than not in recent years, it may be poised for a comeback. With market volatility steadily rising over the last three years and some of the underperforming areas of recent years potentially poised to bounce back, investors may once again soon enjoy the potential benefits of diversification. ■

IMPORTANT DISCLOSURES

The opinions voiced in this material are for general information only and are not intended to provide specific advice or recommendations for any individual. To determine which investment(s) may be appropriate for you, consult your financial advisor prior to investing. All performance referenced is historical and is no guarantee of future results.

Investing in stock includes numerous specific risks including: the fluctuation of dividend, loss of principal and potential illiquidity of the investment in a falling market.

Indices are unmanaged index and cannot be invested into directly. Unmanaged index returns do not reflect fees, expenses, or sales charges. Index performance is not indicative of the performance of any investment.

Investing in foreign and emerging markets securities involves special additional risks. These risks include, but are not limited to, currency risk, geopolitical risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

INDEX DESCRIPTIONS

The S&P 500 Index is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

The Russell Midcap Index offers investors access to the mid cap segment of the U.S. equity universe. The Russell Midcap Index is constructed to provide a comprehensive and unbiased barometer for the mid cap segment and is completely reconstituted annually to ensure that larger stocks do not distort the performance and characteristics of the true mid cap opportunity set. The Russell Midcap Index includes the smallest 800 securities in the Russell 1000.

The Russell 2000 Index measures the performance of the small cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000 Index representing approximately 10% of the total market capitalization of that index.

The MSCI Emerging Markets Index is a free float-adjusted, market capitalization index that is designed to measure equity market performance of emerging markets.

The MSCI EAFE Index is a free float-adjusted, market-capitalization index that is designed to measure the equity market performance of developed markets, excluding the United States and Canada.

The FTSE NAREIT All Equity REITs Index contains all tax-qualified REITs with more than 50% of total assets in qualifying real estate assets, other than mortgages secured by real property that also meet minimum size and liquidity.

RES 5612 0816 | Tracking # 1-528449 (Exp. 08/17)