LPL RESEARCH
TIMELY TOPICS

September 2016

BENCHMARKING PORTFOLIO PERFORMANCE

KEY TAKEAWAYS

New diversified benchmarks help demonstrate and explain your account performance by including diversifying asset classes that are more closely aligned with the construction of your portfolio.

The investment objective benchmarks remain as an effective tool to measure the positive or negative contribution of diversification.

Indexes 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. Past performance is no guarantee of future results.

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

As investors, we often face a challenging question when trying to assess our portfolios: What is the best way to measure success? In most instances, you should measure success by monitoring your progress—in other words, that you are moving closer to attaining the goals you laid out in planning with your advisor. In addition to focusing on goal attainment or absolute returns (e.g., a 5% annual return), the concept of returns relative to a benchmark is ingrained in the investment industry. The media have also made it so that benchmarks, like the S&P 500, are constantly mentioned and often thought of as the return for a typical stock portfolio. It is hard to focus on success relative to your goals when we are consistently hearing how the S&P 500 Index, Dow Jones Industrial Average, and Nasdaq are performing during every minute of every day—forgetting to point out that no one can directly own those indexes or attain those returns.

WHAT BENCHMARKS DO I SEE ON MY STATEMENTS TODAY?

As members of the investment industry, LPL Financial has put benchmark performance on statements and other communications for years. There are times when you might see the returns of the S&P 500 or other market indexes. However, in most instances, you have seen the LPL Financial investment objective (IO) benchmarks. Decades ago, LPL created benchmarks to approximate the risk-return characteristics associated with five IO profiles that are associated with your LPL account (Aggressive Growth, Growth, Growth with Income, Income with Moderate Growth, and Income with Capital Preservation). The IO benchmarks combine to varying degrees, depending on the IO, an allocation to:

- Broad U.S. equities (measured by the Russell 3000 Index)
- Broad U.S. bonds (measured by the Barclays Capital U.S. Aggregate Bond Index)
- Cash (measured by the Citigroup 3-Month Treasury Bill Index)

The IO benchmark, with its simplicity, makes it an easy benchmark to use and understand. Simply stated, the IO benchmark provides an idea of the path your portfolio may take to reach your investment goal, but the exact route will be influenced by the decisions on how to navigate different market conditions or address specific needs. In reality, your portfolio may never

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look like the IO benchmark. The IO benchmark is simple—meaning it is undiversified. LPL Research and most advisors believe some level of diversification should be used to allow for increased return opportunities, as well as to help mitigate portfolio risk. Therefore, it is probable that the construction of your portfolio will differ during most, if not all, times from the composition of the IO benchmark, based on decisions made by your advisor or LPL Research.

WHAT ARE THE NEW DIVERSIFIED BENCHMARKS THAT I WILL START TO SEE?

LPL Research is providing additional guidance through benchmarks that more closely represent typical client portfolios. As a result, we are introducing new diversified benchmarks as a tool to assist you in better understanding the causes of your portfolio performance. The diversified benchmarks represent a more encompassing asset class mix than the IO benchmarks. By incorporating additional asset classes in the benchmarks, the diversified benchmarks are more aligned with most clients' typical investment portfolios. And, if your portfolio is managed for tax awareness, or focused on socially responsible investing (SRI) or environmental, social, governance (ESG) investing, we have created tailored diversified benchmarks to measure these specific portfolio goals.

These new standard diversified benchmarks, which are used for the majority of strategic and tactical portfolios, diversify the equity exposure from solely U.S. large cap to a combination of:

- U.S. large cap equities (measured by the S&P 500 Index)
- U.S. small cap equities (measured by the Russell 2000 Index)
- International developed equities (measured by the MSCI EAFE Index)
- International emerging market equities (measured by the MSCI Emerging Markets Index)

Here is how the current IO benchmarks compare to the new diversified benchmarks [Figure 1].

1 BREAKING DOWN THE BENCHMARKS

	Index	Aggressive Growth	Growth	Growth with Income	Income with Moderate Growth	Income with Capital Preservation
Investment Objective Benchmarks	Russell 3000 Index	95%	80%	60%	40%	20%
	Barclays Aggregate Bond Index	0%	15%	35%	53%	70%
	Citigroup 3-Month Treasury Bill	5%	5%	5%	7%	10%
	Total	100%	100%	100%	100%	100%
Diversified Benchmarks	S&P 500 Index	57%	48%	36%	24%	12%
	Russell 2000 Index	19%	16%	12%	8%	4%
	MSCI EAFE Index	12%	10%	8%	5%	4%
	MSCI Emerging Markets Index	7%	6%	4%	3%	0%
	Barclays Aggregate Bond Index	0%	15%	35%	53%	70%
	Citigroup 3-Month Treasury Bill	5%	5%	5%	7%	10%
	Total	100%	100%	100%	100%	100%

Source: LPL Research, Standard & Poors, Russell, MSCI, Barclays, Citigroup 08/05/16

Please refer to page 5 for the definitions of the different investment objectives.

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The new diversified benchmarks provide exposure to equities outside of U.S. large cap equities, by including small cap, international, and emerging market stock indexes. We also are making a slight change for the U.S. large cap equity benchmark. Currently, equity exposure is expressed solely through the Russell 3000 Index, which is predominantly a U.S. large cap biased index. The diversified benchmarks express the U.S. large cap exposure using the S&P 500 Index. Both of these indexes, in our opinion, are an acceptable way to capture the performance of large cap U.S. equities. However, we elected to use the S&P 500 Index in the new diversified benchmarks because it is the more broadly publicized index, relative to the Russell 3000 Index.

For tax-sensitive portfolios, the diversified benchmarks employ a tax-exempt fixed income index (Barclays Municipal Bond Index) instead of a taxable index. For SRI and ESG portfolios, the underlying holdings are typically selected from unique investment pools based on SRI and/or ESG criteria. As a result, the benchmarks should reflect these differences. For equity exposure, we are utilizing socially responsible specific indexes [Figure 2].

WHAT ARE THE ADVANTAGES OF THE DIVERSIFIED BENCHMARKS?

We believe the IO benchmarks are an appropriate tool to use when gauging performance of your portfolio. They easily demonstrate how out-of-benchmark, or diversifying, investments have positively or negatively impacted the performance of your portfolio. By using only three very broad benchmarks, you are able to more easily see the value added by your advisor or LPL Research, who encouraged you to invest in a diversified portfolio. However, there are times when doing the right thing—i.e., being diversified—is not beneficial to performance relative to a passive, undiversified benchmark.

Being diversified typically helps portfolio performance and reduces volatility over time. However, there are often short-term cycles when being diversified is a "penalty" [Figure 3]. During the past several years, diversified portfolios exposed to asset classes outside of U.S.-focused, large cap equity and core fixed income benchmarks (which are the components of the IO benchmarks) have not benefited investor portfolios—as non-U.S., small cap, and non-core bond allocations

2 DIVERSIFIED BENCHMARKS FOR SRI/ESG PORTFOLIOS

Index	Aggressive Growth	Growth	Growth with Income	Income with Moderate Growth	Income with Capital Preservation
MSCI KLD 400 Social Index	76%	64%	48%	32%	16%
MSCI World ex U.S. Socially Responsible Index	19%	16%	12%	8%	4%
Barclays Aggregate Bond Index	0%	15%	35%	53%	70%
Citigroup 3-Month Treasury Bill	5%	5%	5%	7%	10%
Total	100%	100%	100%	100%	100%

Source: LPL Research, MSCI, Barclays, Citigroup 08/05/16

Please refer to page 5 for the definitions of the different investment objectives.

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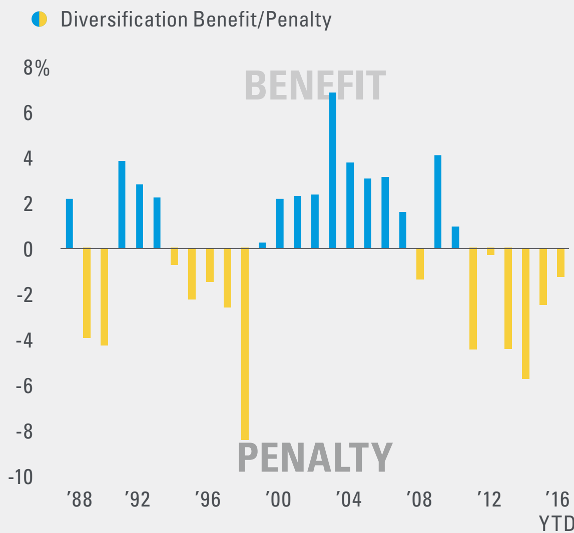
hindered performance of portfolios. This trend has started to turn during 2016.

However, over the long term, the benefits of a diversified portfolio are clearly apparent through the improvement of return and the reduction of portfolio volatility. Figure 4 shows the percentage of times, on a monthly basis, when a diversified equity portfolio (the equity components of the new diversified benchmark) outperformed one comprised solely of U.S.-focused, large cap equities (the S&P 500 Index, which is undiversified). This shows that, historically, over a 1-year basis, the diversified and undiversified portfolios return about the same. However, over longer periods of time (10-year and 20-year periods), the diversified portfolio outperforms the undiversified portfolio (the one similar to the IO benchmark).

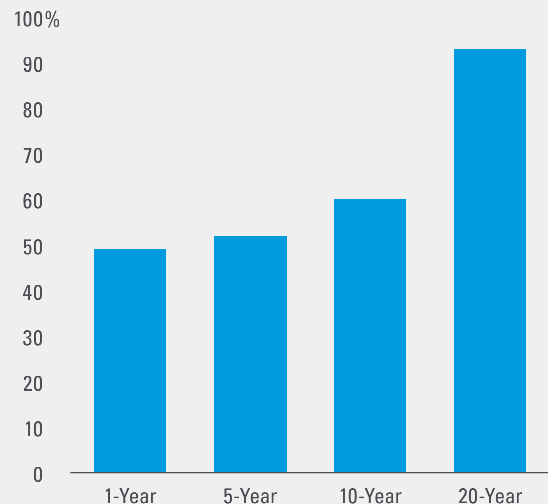
Historical numbers are great to talk about for perspective, but unfortunately, we tend to more acutely remember the near term. The past several years have been an extremely tough environment for asset allocators who hold diversified portfolios, as diversification has generally proved to be a significant short-term headwind. So, where do we go from here? Stay the course. Diversification has historically worked over the long term, and we, as investors, may stand to benefit again. ■

3 DIVERSIFICATION IS A BENEFIT OR PENALTY TO PORTFOLIO PERFORMANCE



Source: LPL Research, Zephyr, FactSet 08/05/16

4 PERCENTAGE OF ROLLING PERIODS WHERE A DIVERSIFIED EQUITY PORTFOLIO OUTPERFORMED ONE OF U.S. LARGE CAP EQUITIES



Source: LPL Research, Zephyr 08/05/16

Diversification benefits are based on the difference between the return for the S&P 500 and the LPL Aggressive Growth Diversified Benchmark: 57% S&P 500 Index, 19% Russell 2000 Index, 12% MSCI EAFE Index, 7% MSCI Emerging Markets Index, and 5% Citigroup 3-Month Treasury Bill rebalanced monthly. Rolling periods use monthly returns from 01/01/88 through 06/30/16. This analysis is for illustrative purposes only. Results would have been different had different indexes or time frames been used.

Past performance is not indicative of future results. All indexes are unmanaged and cannot be invested into directly.

Data analyzed for Figure 4 is monthly periodicity from 01/01/88 – 06/30/16. Number of samples for each rolling period: 1-year: 331, 5-year: 283, 10-year: 223, and 20-year: 103.

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IMPORTANT DISCLOSURES

The opinions voiced in this material are for general information only and are not intended to provide specific advice or recommendations for you or your clients. All performance reference is historical and is no guarantee of future results. All indexes are unmanaged and cannot be invested into directly.

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.

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

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.

Bonds are subject to market and interest rate risk if sold prior to maturity. Bond and bond mutual fund values and yields will decline as interest rates rise and bonds are subject to availability and change in price.

Municipal bonds are subject to availability, price, and to market and interest rate risk if sold prior to maturity. Bond values will decline as interest rate rise. Interest income may be subject to the alternative minimum tax. Federally tax-free but other state and local taxes may apply.

Investing in real estate/REITs involves special risks such as potential illiquidity and may not be suitable for all investors. There is no assurance that the investment objectives of this program will be attained.

INVESTMENT OBJECTIVES

Aggressive Growth will essentially be fully invested in equity assets at all times (with the exception of a 5% cash position). Investors in this portfolio should have a long time horizon of 10 years or more, an understanding of the volatile history of equity investments, and a propensity to add money to the account on a systematic basis. This portfolio is very aggressive by nature and should not be considered by anyone unwilling to take on significant risk.

Growth will be targeted to an allocation of 80% in equity assets and 20% in fixed income assets (including a 5% cash position). Investors in this portfolio should have a long time horizon, an understanding of the volatile history of equity investments, and a propensity to add money to the account on a systematic basis. This portfolio is aggressive by nature and should not be considered by anyone unwilling to take on significant risk.

Growth with Income Investors in this portfolio should have a long time horizon, and an understanding of the volatile history of equity investments. The primary investment objective of this portfolio is growth of principal. Fixed income assets are included to generate income and reduce overall volatility.

Income with Moderate Growth will be targeted to a normal allocation of 40% in equity assets and 60% in fixed income assets (including a 7% cash position). Investors in this portfolio should have a time horizon of more than five years, and be comfortable with the volatile history of equity investments. The primary investment objective of this portfolio is income, with growth of principal an important consideration. Fixed income assets form the core of the portfolio, generating income and lowering the portfolio's overall volatility. Equity assets provide the opportunity for long-term growth of principal.

Income with Capital Preservation will be targeted to a normal allocation of 21% in equity assets and 79% in fixed income assets (including a 10% cash position). Investors in this portfolio should have a time horizon of more than five years, and be comfortable with the volatility that will occur within the modest equity portion of their investment portfolio. The primary investment objective of this portfolio is income, with growth of principal as a secondary concern. Fixed income assets form the core of the portfolio, generating a steady income stream. A small investment in equity assets provides the opportunity for modest long-term growth of principal.

INDEX DEFINITIONS

The Barclays U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS, and CMBS (agency and non-agency).

The Barclays Municipal Bond Index is a market capitalization-weighted index of investment-grade municipal bonds with maturities of at least one year. All indexes are unmanaged and include reinvested dividends. One cannot invest directly in an index. Past performance is no guarantee of future results.

The Citigroup 3-Month U.S. Treasury Bill Index tracks the performance of US Treasury bills with a remaining maturity of three months. Investing in an index is not possible.

The Dow Jones Industrial Average Index is comprised of U.S.-listed stocks of companies that produce other (non-transportation and non-utility) goods and services. The Dow Jones industrial averages are maintained by editors of The Wall Street Journal. While the stock selection process is somewhat subjective, a stock typically is added only if the company has an excellent reputation, demonstrates sustained growth, is of interest to a large number of investors, and accurately represents the market sectors covered by the average. The Dow Jones averages are unique in that they are price weighted; therefore, their component weightings are affected only by changes in the stocks' prices.

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.

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 MSCI KLD 400 Social Index is a capitalization weighted index of 400 US securities that provides exposure to companies with outstanding environmental, social, and governance (ESG) ratings and excludes companies whose products have negative social or environmental impacts.

The MSCI ACWI Socially Responsible Index, based on SEB SRI Policy B, is a custom index based on ESG screening criteria specified by SEB. The index is derived from the MSCI All Country World Index. The socially responsible screening will be performed by MSCI ESG Research. Socially responsible screening excludes from the index, for example, companies involved in the manufacture of controversial weapons or companies in breach of the UN Global Compact Principles. Specific criteria are followed regarding investing in companies whose business activities involves weapons, tobacco, alcohol, commercial gambling and pornography.

The Nasdaq Composite Index measures all Nasdaq domestic and non-U.S.-based common stocks listed on the Nasdaq stock market. The index is market-value weighted. This means that each company's security affects the index in proportion to its market value. The market value, the last sale price multiplied by total shares outstanding, is calculated throughout the trading day, and is related to the total value of the index. It is not possible to invest directly in an index.

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 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 3000 Index measures the performance of the largest 3,000 U.S. companies representing approximately 98% of the investable U.S. equity market.

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.

This research material has been prepared by LPL Financial LLC.

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