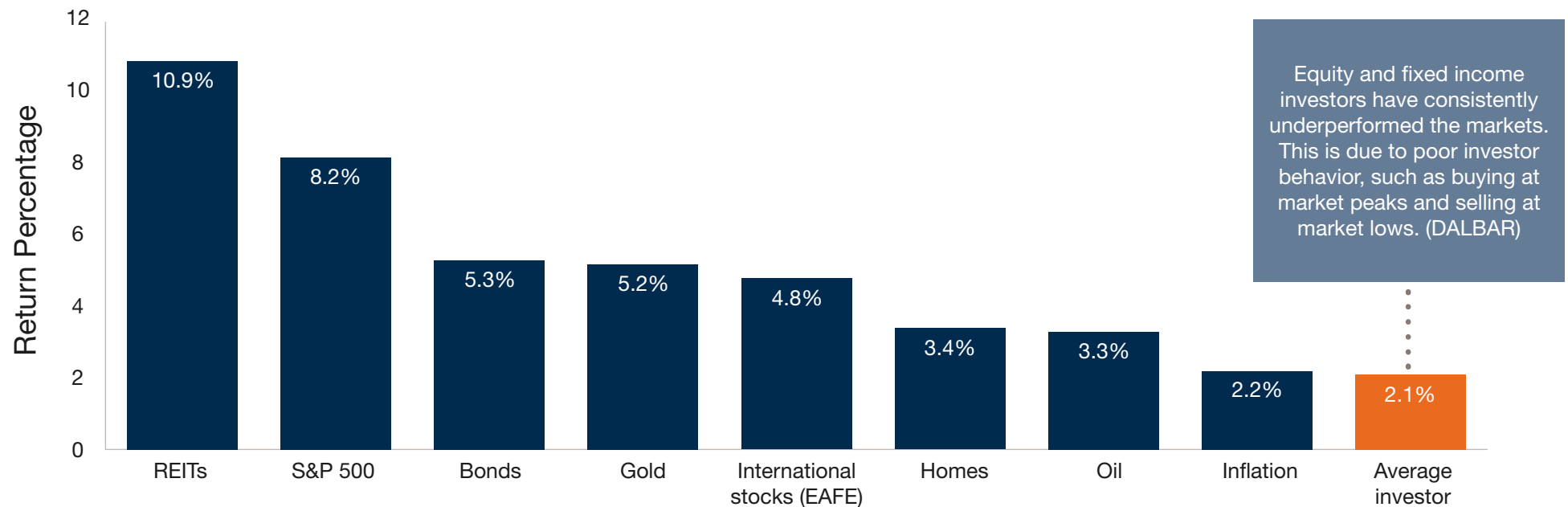


# The Behavioral Effect on Investor Returns

20-Year Annualized Returns (1996–2015)

# The Behavioral Effect on Investor Returns

20-Year Annualized Returns (1996–2015)



Source: J.P. Morgan Asset Management, DALBAR QAIB 2016

**Disclosure:** Past performance is no guarantee of future results. The indices used are as follows: REITs: FTSE NAREIT Equity REIT Index TR USD, EAFE: MSCI EAFE GR USD, Oil: WTI Index, Bonds: Barclays U.S. Aggregate Index, Homes: National Association of Realtors median sale price of existing single-family homes, Gold: London Fix Gold PM PR USD, Inflation: CPI. Average asset allocation investor return is based on an analysis by Dalbar, Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Returns are annualized (and total return where applicable) and represent the 20-year period ending Dec. 31, 2015, to match Dalbar's most recent analysis. The indices listed above are unmanaged indices. An investment cannot be made directly in an index. There are special risks of investing in REITs, such as lack of liquidity and potential adverse and economic regulatory changes. Commodities can be extremely volatile investments. International investing presents certain risks not associated with investing solely in the United States. This chart is for illustrative purposes only and is not intended to predict or depict the return of any one investment.

## The Behavioral Effect on Investor Returns – Why This Matters to You

This illustration from J.P. Morgan Asset Management shows the annual returns for six major asset classes for the 20-year period ending Dec. 31, 2015. It also includes the annual rate of consumer inflation over the last 20 years and the general rate of appreciation in residential home values measured by existing home sales.

The bar on the far right shows the annual return of the average mutual fund investor (using a blend of both stock and bond mutual funds according to the DALBAR Quantitative Analysis of Investor Behavior survey). What is the reason it is lower than everything else? It is investor behavior, caused by decisions of selling and buying and when to get in and out of investments.

DALBAR, a leading research company, used data from the Investment Company Institute to compare mutual fund investor behavior with an appropriate set of benchmarks. Covering the period from Jan. 1, 1996, to Dec. 31, 2015, the study utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. This method of calculation captures realized and unrealized capital gains, dividends, interest, trading costs, sales charges, fees, expenses and any other costs. These behaviors are then used to simulate the “average investor.” Based on this behavior, the analysis calculates the “average investor return” on an annualized basis. This chart illustrates an “average investor” as an investor who is in an “asset allocation portfolio” of both equities and bonds. The goal of this DALBAR study is to educate investors and the advisors who advise them on the importance of behavior in determining the outcome of any investment strategy.

Mutual fund firms often tout the results of “buy-and-hold investors” and use market indices to illustrate their points. For example, this chart shows what true 20-year buy-and-hold stock and bond index fund investors would have earned on an annualized basis since 1996: Long-term (20-year) stock investors would have returned greater than 8 percent per year, while bond investors would have earned just more than 5 percent annually. However, investors are impatient and often jump in and out of the market, diminishing their returns. Other DALBAR data showed that investors simply do not have the patience to stay invested for more than a few years<sup>1</sup>.

For several years, DALBAR has analyzed when investors get in and out of the market to see how their decisions compare to the wise investing adage to buy low and sell high. They found that it's easy to be right when the market is steadily rising, but during turbulent times, investors need guidance.

The principles of behavioral finance help explain why investors often make buy and sell decisions that contradict best investment practice. In order to correct the behavior, advisors and others need to understand that investors suffer from:

- **Loss aversion:** expecting high returns with low risk.
- **Narrow framing:** making decisions without considering all implications.
- **Anchoring:** relating to familiar experiences, even when inappropriate.
- **Mental accounting:** taking undue risk in one area and avoiding rational risk in others.
- **Diversification:** Seeking to reduce risk by simply using different sources, giving no thought to how such sources interact.
- **Herding:** copying the behavior of others, even in the face of unfavorable outcomes.
- **Regret:** treating errors of commission more seriously than errors of omission.
- **Media response:** reacting to news without reasonable examination.
- **Optimism:** believing that good things happen to “me” and bad things happen to “others.”

The bottom line: Long-term investment results are heavily dependent on investor behavior. Strong mutual fund selection has shown to be typically beneficial.

However, long-term investors who hold on to their investments have been generally more successful than those who try to time the market.

Past performance is not an indicator of future results. The indices listed above are unmanaged indices. An investment cannot be made directly in an index.

Additional comment on the performance of REITs and gold: Remember that any discussion of the past returns of equity REITs should always be accompanied by mentioning the often extreme volatility and cyclicity of REITs. There are special risks of investing in REITs, such as lack of liquidity and potential adverse and economic regulatory changes. In addition, investors should be aware that there is no assurance that gold will maintain its long-term value in terms of purchasing power in the future. Precious metals, like all investments, carry capital risk and can be highly volatile. Precious metals may appreciate, depreciate or stay the same, depending on a variety of factors.

# **Riding Out the Drawdowns Can Be a Wild Ride**

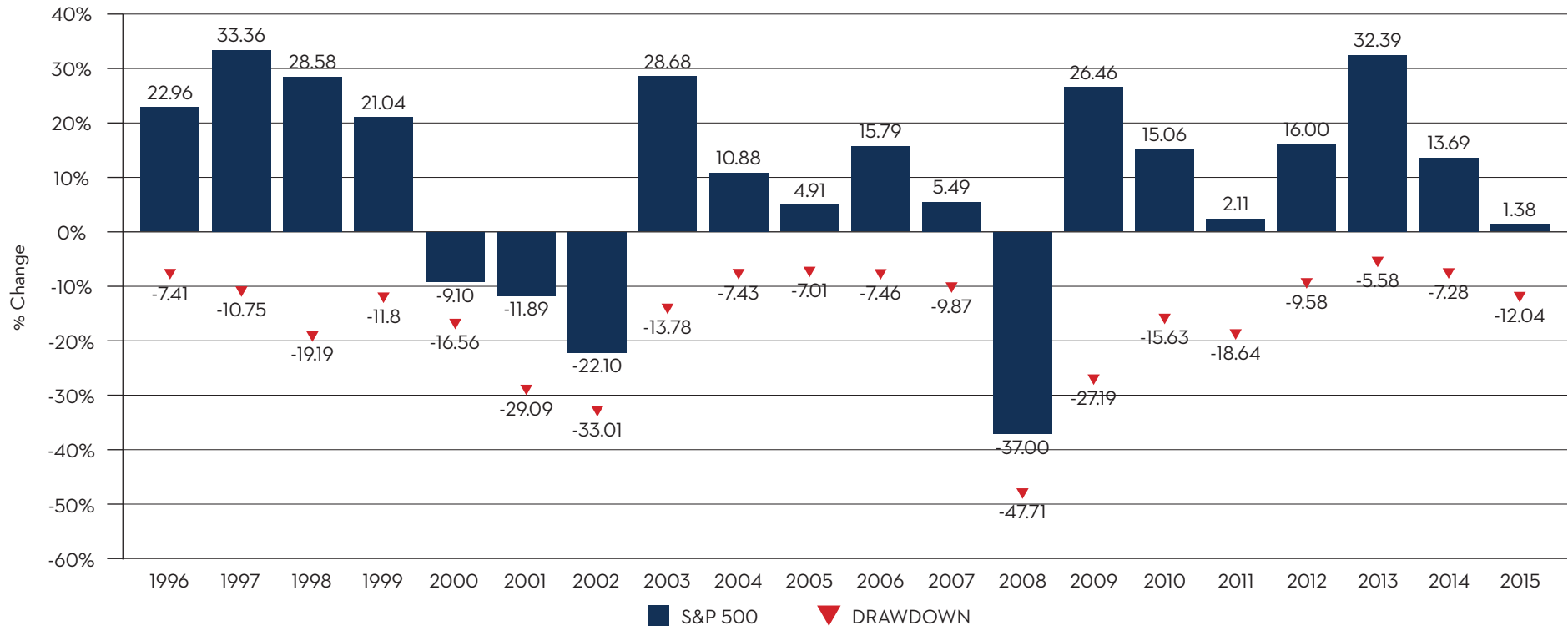
Intra-year dips in the S&P 500 Index happen frequently.

# Riding Out the Drawdowns Can Be a Wild Ride

## Intra-year dips in the S&P 500 Index happen frequently.

Nearly all investors with long-term investment plans will have some degree of exposure to equities, and it's important that these investors understand that equity returns can be quite volatile. Yet, it doesn't take much of a drop, or drawdown, in equity values for investors to start doubting whether equity exposure is the right thing for them. These fears are typically elevated by "breaking news" alerts on their smartphones and TV pundits proclaiming that a market crash is imminent.

This chart helps to illustrate the level of volatility that can be expected from equities, even in "good" years. For example, only in one of the past 20 calendar years did the market not drop more than 7 percent at some point during the year. In fact, the market experienced a 10-percent or more intra-year drop in 12 of the past 20 years. It is important for investors to understand that when investing in equities, one should expect significant drops in value to occur every single year. In many cases, this is simply the price to pay to potentially capture the long-term returns that will enable investors to live intentionally during retirement.



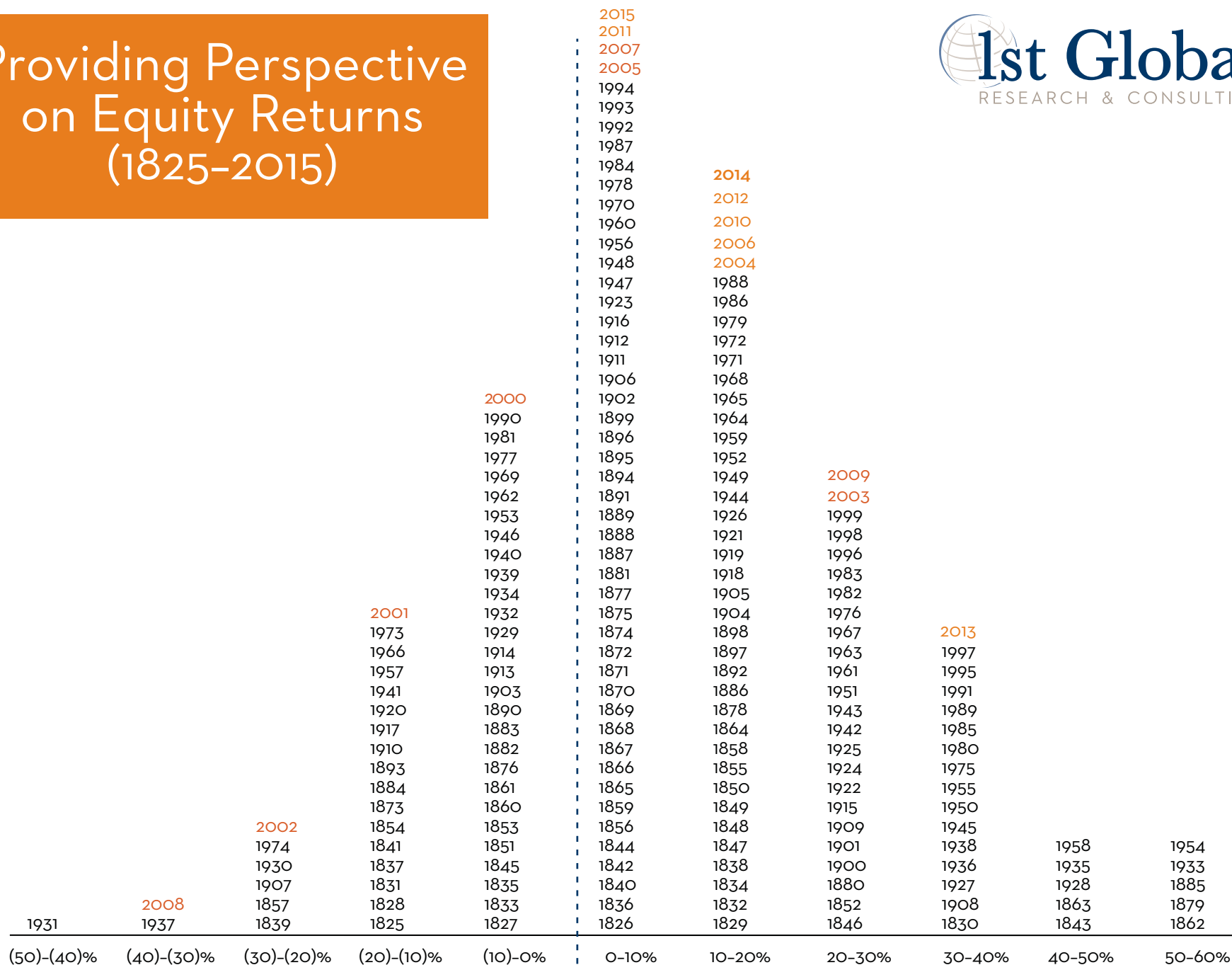
Data Source: Morningstar, January 2016

Assumes reinvestment of capital gains and dividends and no taxes. Past performance is not indicative of future returns. S&P 500 Index is a market capitalization-weighted price index composed of 500 widely held common stocks. The index is unmanaged and not available for direct investment. Securities offered through 1st Global Capital Corp., member FINRA, SIPC. Investment advisory services offered through 1st Global Advisors, Inc.

# Providing Perspective on Equity Returns (1825–2015)

Equity Returns 1825–2015 — What This Means  
to an Equity Investor

# Providing Perspective on Equity Returns (1825-2015)



Source: Annual U.S. equity returns for the period of 1825 through 1925 are republished from "A new historical database for the NYSE 1815 to 1925: Performance and predictability" by William N. Goetzmann, Roger G. Ibbotson and Liang Peng as published in the Journal of Financial Markets 4(2001) 1-32, pp. 27-30 using the "Total return with low dividends" return series; annual U.S. equities returns for the period of 1926 to the most recent year end are that of the Ibbotson Associates SBBI US Large Stock Total Return Index (USD) obtained from Morningstar Direct.

## Equity Returns 1825-2015 – What This Means to an Equity Investor

This chart is known as a “histogram.” It lists the historical returns of investing in common stocks (equities) by classifying calendar-year returns into equal intervals (ranges) of 10 percentage points. Each stack contains a listing of years. The corresponding number below each stack represents the range of return for equities in those individual calendar years.

This histogram goes all the way back to 1825, is culled from various sources and is designed to show the historical performance of U.S. stocks. As you can see, the tallest stack represents the return range for stocks for the greatest number of individual calendar years going back in time.

The stacks to the right of the dotted line in this “histogram” represent years in which the return for equities was positive. Notice how the highest stack is in the 0 percent to 10 percent range. This means that, going back to 1825, the most frequent yearly return for U.S. stocks was in the 0-percent to 10-percent range. The second highest stack is in the 10-percent to 20-percent range. This means, going back to 1825, the second most frequent return for stocks was in the 10-percent to 20-percent range. Notice how there are quite a few calendar years in which the returns were in the range of 20-percent to 30-percent. That 20-percent to 30-percent range includes several years in the late 1990s.

The stacks to the left of the dotted line represent individual years in which stock returns were negative. As you can see, there are a number of years in which the returns for U.S. stocks were in the range that goes from 0 down to -10 percent. You may notice that several of those years were periods in which the economy was at the end of an expansionary period and was entering a recession. Some examples include 2000, 1990, 1981 and 1962.

This histogram gives an excellent visual representation of the distribution of stock returns over a long period of time. Many investors have been taught that holding stocks over long periods of time normally yields positive returns somewhere in and around 10 percent. It also should be mentioned that there can be extended periods in which stock returns are below this.

Another way to look at this histogram is to view it as the volatility of equity returns. Historically, yearly stock returns have clustered within a few of these 10-percent ranges. Extremely high returns in any given year are rare. Extreme negative returns in any given year are even rarer. This can be seen in that there are fewer numbers on the left side of this histogram.

This chart highlights that U.S. stocks were down 38 percent in 2008. Compared to history, this was a rare occurrence. The only other calendar years in which stocks were down more than 30 percent were 1937 and 1931. You might remember that this was during the Great Depression. During periods of severe financial panics and subsequent economic slumps, stocks can fall significantly as investors seek safety and liquidity. To reiterate, very large losses in stocks in any given year are very infrequent events, but they can happen when financial markets are stressed and investors panic.

On the other hand, severe downdrafts in the markets can lead to subsequent large moves on the upside. One of the best annual performances for stocks occurred in 1933, also in the midst of the Great Depression (see the last stack all the way to the right), when the return hit the 50 percent to 60 percent range. The latest financial crisis has followed a similar pattern with two years of consecutive double-digit returns (24 percent in 2009 and 15 percent in 2010).

So, why is this important? Despite a wide range of returns, investing in equities has historically been a solid way to accumulate wealth over the long term. Despite some rough times in the economy, stocks can and do “look ahead” to recovery and move higher. In 1982 and 1983, the U.S. was in the midst of a recession with a double-digit unemployment rate. U.S. stocks returned 21 percent in 1982 and 23 percent in 1983.

U.S. stocks may not continue the same pattern as the past 190 years. However, the histogram suggests the long-standing belief that equity investors have been rewarded over the years with more positive years than negative years. Also, the positive return years, on average, have been greater than the negative return years. With short-term market swings in the news on a daily basis, investors should view their portfolios within their time horizons and consider their time in the market and their risk tolerance. Past performance is not an indicator of future results.



# **The Stabilizing Power of Diversification (2006–2015)**

# The Stabilizing Power of Diversification (2006–2015)

## Aggressive Growth Allocation

### Diversification can help you smooth out the market's ups and downs over time.

To create a well-diversified portfolio, consider spreading your equity holdings among growth, value, small-cap, large-cap and international stocks; balancing your fixed-income holdings among different types of bonds; and adding specialty holdings such as REITs and commodities. The chart shows the year-by-year returns of several broad-based asset classes since 2006. Notice how the Diversified Portfolio (yellow), composed using indexes of all asset classes listed and rebalanced annually, was a more consistent performer than the individual asset classes.

For investors, a well-diversified portfolio can often alleviate concerns about being invested in the right place at the right time. Properly allocating your assets among various asset classes and diversifying your portfolio among several investment vehicles are methods designed to provide you with an efficiently diversified portfolio strategy that reduces volatility.

### About the chart

The historical performance of each representative index cited is provided to illustrate market trends; it does not represent the performance of a particular investment product. Past performance does not guarantee future results. Index performance does not reflect the deduction of any investment-related fees and expenses. It is not possible to invest directly in an index. Asset allocation/diversification of your overall investment portfolio does not assure a profit or protect against a loss in declining markets.



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Annualized Return	Standard Deviation
35.06	39.82	5.24	79.02	27.96	8.29	18.63	38.82	30.14	3.20	7.41	25.48
32.55	16.23	1.77	37.01	26.85	7.84	18.06	32.39	13.69	1.38	7.31	15.06
26.86	11.63	-33.79	32.46	19.28	2.11	17.90	23.29	5.97	0.55	6.80	19.78
22.35	9.57	-35.65	27.99	19.20	0.07	16.35	19.99	5.19	0.03	5.74	17.26
18.37	6.97	-37.00	27.17	16.83	-4.18	16.00	2.47	4.89	-0.39	4.51	3.22
15.79	5.49	-37.73	26.46	15.06	-5.92	15.77	0.05	0.02	-4.41	3.95	23.60
4.80	4.78	-38.99	18.91	8.21	-11.73	4.21	-2.02	-1.82	-4.90	3.50	18.49
4.33	-1.57	-43.06	5.93	6.54	-13.32	0.08	-2.27	-4.48	-14.60	1.17	0.55
2.07	-15.69	-53.18	0.15	0.13	-18.17	-1.06	-9.52	-17.01	-24.66	-6.43	18.16

**Cash** is defined as The Barclays US Treasury Bill 1-3 Month TR Index, which is an unweighted index that measures the performance of one- to three-month maturity of U.S. Treasury bills.

**Fixed Income** is defined as The Barclays Aggregate Bond Index, which covers the U.S. investment grade fixed-rate bond markets, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. Investing in fixed-income securities involves credit and interest rate risk. When interest rates rise, bond prices generally fall.

**Domestic Large Cap Equity** is defined as The S&P 500 Index, which is a free-float market capitalization index of the 500 largest publicly held U.S.-based companies, capturing 75-percent coverage of U.S. equities. It is often used as a proxy for the American stock market.

**Domestic Small Cap Equity** is defined as The Russell 2000 Index, which measures the performance of the smallest 2,000 U.S.-based companies in the Russell 3000 Index and serves as a benchmark for U.S. small-cap stocks. The equity securities of small companies may not be traded as often as equity securities of large companies, so they may be difficult or impossible to sell.

**International Developed Equity** is defined as The MSCI EAFE Index (Europe, Australasia, Far East), which is a free float-adjusted market capitalization index that is designed to measure the equity performance of 22 developed markets, excluding the U.S. and Canada. The MSCI EAFE Index is commonly used as a benchmark for equities representing the developed world outside of North America. International investing presents certain risks – like currency, custodial, political and transparency risk – not associated with investing solely in the United States.

**International Emerging Market Equity** is defined as The MSCI Emerging Markets Index, which is a free float-adjusted market capitalization index that is designed to measure equity performance in the global emerging markets. Investing in emerging markets involves greater risk than investing in more established markets due to exchange rate changes, political and economic upheaval, and low market liquidity.

**Real Estate** is defined as The FTSE NAREIT Equity REIT Index, which includes all equity REITs trading on the NYSE, Euronext and the NASDAQ OMX. Equity REITs are defined as firms that own, manage and lease investment-grade commercial real estate. Investing in a non-diversified fund that concentrates holdings into fewer securities or industries involves greater risk than investing in a more diversified fund. Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

**Commodities** are defined as The Bloomberg Commodity Index TR, which is a diversified benchmark for commodities and is composed of futures contracts on physical commodities. It uses both liquidity data and U.S. dollar-weighted production data in determining the relative quantities of included commodities. No related group of commodities (e.g., energy, precious metals, livestock or grains) may constitute more than 33 percent of the index.

**Standard deviation** is an indicator of the portfolio's volatility around its average annual return. The larger the portfolio's standard deviation, the greater the variability of the portfolio's annual return.

Aggressive Growth Allocation Composition		Aggressive Growth Allocation
Asset Class	Representative Index	
Cash	Barclays US Treas 1-3 Mo T-Bill	3%
Fixed Income	Barclays US Aggregate Bond TR	-
U.S. Large Cap Equity	S&P 500 TR	19%
U.S. Small Cap Equity	Russell 2000 TR	29%
International Developed Market Equity	MSCI EAFE GR	14%
International Emerging Market Equity	MSCI EM GR	20%
Real Estate	FTSE NAREIT Equity REIT TR	10%
Commodities	Bloomberg Commodity TR	5%

The returns of the asset allocation example assumes an annual rebalancing back to original weights and the linking of monthly returns.

The results shown are not the actual performance figures for any particular client.

Source of returns: Morningstar Direct. (Jan. 1, 2006 through Dec. 31, 2015)



# The Stabilizing Power of Diversification (2006–2015)

## Growth Allocation

### Diversification can help you smooth out the market's ups and downs over time.

To create a well-diversified portfolio, consider spreading your equity holdings among growth, value, small-cap, large-cap and international stocks; balancing your fixed-income holdings among different types of bonds; and adding specialty holdings such as REITs and commodities. The chart shows the year-by-year returns of several broad-based asset classes since 2006. Notice how the Diversified Portfolio (yellow), composed using indexes of all asset classes listed and rebalanced annually, was a more consistent performer than the individual asset classes.

For investors, a well-diversified portfolio can often alleviate concerns about being invested in the right place at the right time. Properly allocating your assets among various asset classes and diversifying your portfolio among several investment vehicles are methods designed to provide you with an efficiently diversified portfolio strategy that reduces volatility.

### About the chart

The historical performance of each representative index cited is provided to illustrate market trends; it does not represent the performance of a particular investment product. Past performance does not guarantee future results. Index performance does not reflect the deduction of any investment-related fees and expenses. It is not possible to invest directly in an index. Asset allocation/diversification of your overall investment portfolio does not assure a profit or protect against a loss in declining markets.



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Annualized Return	Standard Deviation
35.06	39.82	5.24	79.02	27.96	8.29	18.63	38.82	30.14	3.20	7.41	25.48
32.55	16.23	1.77	32.46	26.85	7.84	18.06	32.39	13.69	1.38	7.31	15.06
26.86	11.63	-32.78	29.17	19.20	2.11	17.90	23.29	6.04	0.55	6.80	19.78
18.37	8.42	-33.79	27.99	16.83	0.07	16.35	19.83	5.97	0.03	5.81	13.97
18.09	6.97	-35.65	27.17	15.48	-2.77	16.00	2.47	4.89	-0.39	4.51	3.22
15.79	5.49	-37.00	26.46	15.06	-4.18	13.96	0.05	0.02	-2.70	3.95	23.60
4.80	4.78	-37.73	18.91	8.21	-11.73	4.21	-2.02	-1.82	-4.41	3.50	18.49
4.33	-1.57	-43.06	5.93	6.54	-13.32	0.08	-2.27	-4.48	-14.60	1.17	0.55
2.07	-15.69	-53.18	0.15	0.13	-18.17	-1.06	-9.52	-17.01	-24.66	-6.43	18.16

**Cash** is defined as The Barclays US Treasury Bill 1-3 Month TR Index, which is an unweighted index that measures the performance of one- to three-month maturity of U.S. Treasury bills.

**Fixed Income** is defined as The Barclays Aggregate Bond Index, which covers the U.S. investment grade fixed-rate bond markets, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. Investing in fixed-income securities involves credit and interest rate risk. When interest rates rise, bond prices generally fall.

**Domestic Large Cap Equity** is defined as The S&P 500 Index, which is a free-float market capitalization index of the 500 largest publicly held U.S.-based companies, capturing 75-percent coverage of U.S. equities. It is often used as a proxy for the American stock market.

**Domestic Small Cap Equity** is defined as The Russell 2000 Index, which measures the performance of the smallest 2,000 U.S.-based companies in the Russell 3000 Index and serves as a benchmark for U.S. small-cap stocks. The equity securities of small companies may not be traded as often as equity securities of large companies, so they may be difficult or impossible to sell.

**International Developed Equity** is defined as The MSCI EAFE Index (Europe, Australasia, Far East), which is a free float-adjusted market capitalization index that is designed to measure the equity performance of 22 developed markets, excluding the U.S. and Canada. The MSCI EAFE Index is commonly used as a benchmark for equities representing the developed world outside of North America. International investing presents certain risks – like currency, custodial, political and transparency risk – not associated with investing solely in the United States.

**International Emerging Market Equity** is defined as The MSCI Emerging Markets Index, which is a free float-adjusted market capitalization index that is designed to measure equity performance in the global emerging markets. Investing in emerging markets involves greater risk than investing in more established markets due to exchange rate changes, political and economic upheaval, and low market liquidity.

**Real Estate** is defined as The FTSE NAREIT Equity REIT Index, which includes all equity REITs trading on the NYSE, Euronext and the NASDAQ OMX. Equity REITs are defined as firms that own, manage and lease investment-grade commercial real estate. Investing in a non-diversified fund that concentrates holdings into fewer securities or industries involves greater risk than investing in a more diversified fund. Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

**Commodities** are defined as The Bloomberg Commodity Index TR, which is a diversified benchmark for commodities and is composed of futures contracts on physical commodities. It uses both liquidity data and U.S. dollar-weighted production data in determining the relative quantities of included commodities. No related group of commodities (e.g., energy, precious metals, livestock or grains) may constitute more than 33 percent of the index.

**Standard deviation** is an indicator of the portfolio's volatility around its average annual return. The larger the portfolio's standard deviation, the greater the variability of the portfolio's annual return.

Growth Allocation Composition		Growth Allocation
Asset Class	Representative Index	
Cash	Barclays US Treas 1-3 Mo T-Bill	3%
Fixed Income	Barclays US Aggregate Bond TR	12%
U.S. Large Cap Equity	S&P 500 TR	35%
U.S. Small Cap Equity	Russell 2000 TR	15%
International Developed Market Equity	MSCI EAFE GR	15%
International Emerging Market Equity	MSCI EM GR	10%
Real Estate	FTSE NAREIT Equity REIT TR	5%
Commodities	Bloomberg Commodity TR	5%

The returns of the asset allocation example assumes an annual rebalancing back to original weights and the linking of monthly returns.

The results shown are not the actual performance figures for any particular client.

Source of returns: Morningstar Direct. (Jan. 1, 2006 through Dec. 31, 2015)



# The Stabilizing Power of Diversification (2006–2015)

## Moderate Allocation

### Diversification can help you smooth out the market's ups and downs over time.

To create a well-diversified portfolio, consider spreading your equity holdings among growth, value, small-cap, large-cap and international stocks; balancing your fixed-income holdings among different types of bonds; and adding specialty holdings such as REITs and commodities. The chart shows the year-by-year returns of several broad-based asset classes since 2006. Notice how the Diversified Portfolio (yellow), composed using indexes of all asset classes listed and rebalanced annually, was a more consistent performer than the individual asset classes.

For investors, a well-diversified portfolio can often alleviate concerns about being invested in the right place at the right time. Properly allocating your assets among various asset classes and diversifying your portfolio among several investment vehicles are methods designed to provide you with an efficiently diversified portfolio strategy that reduces volatility.

### About the chart

The historical performance of each representative index cited is provided to illustrate market trends; it does not represent the performance of a particular investment product. Past performance does not guarantee future results. Index performance does not reflect the deduction of any investment-related fees and expenses. It is not possible to invest directly in an index. Asset allocation/diversification of your overall investment portfolio does not assure a profit or protect against a loss in declining markets.



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Annualized Return	Standard Deviation
35.06	39.82	5.24	79.02	27.96	8.29	18.63	38.82	30.14	3.20	7.41	25.48
32.55	16.23	1.77	32.46	26.85	7.84	18.06	32.39	13.69	1.38	7.31	15.06
26.86	11.63	-23.68	27.99	19.20	2.11	17.90	23.29	5.97	0.55	6.80	19.78
18.37	7.35	-33.79	27.17	16.83	0.07	16.35	14.36	5.71	0.03	5.55	10.55
15.79	6.97	-35.65	26.46	15.06	-0.30	16.00	2.47	4.89	-0.39	4.51	3.22
14.83	5.49	-37.00	22.40	12.98	-4.18	11.45	0.05	0.02	-1.78	3.95	23.60
4.80	4.78	-37.73	18.91	8.21	-11.73	4.21	-2.02	-1.82	-4.41	3.50	18.49
4.33	-1.57	-43.06	5.93	6.54	-13.32	0.08	-2.27	-4.48	-14.60	1.17	0.55
2.07	-15.69	-53.18	0.15	0.13	-18.17	-1.06	-9.52	-17.01	-24.66	-6.43	18.16

**Cash** is defined as The Barclays US Treasury Bill 1-3 Month TR Index, which is an unweighted index that measures the performance of one- to three-month maturity of U.S. Treasury bills.

**Fixed Income** is defined as The Barclays Aggregate Bond Index, which covers the U.S. investment grade fixed-rate bond markets, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. Investing in fixed-income securities involves credit and interest rate risk. When interest rates rise, bond prices generally fall.

**Domestic Large Cap Equity** is defined as The S&P 500 Index, which is a free-float market capitalization index of the 500 largest publicly held U.S.-based companies, capturing 75-percent coverage of U.S. equities. It is often used as a proxy for the American stock market.

**Domestic Small Cap Equity** is defined as The Russell 2000 Index, which measures the performance of the smallest 2,000 U.S.-based companies in the Russell 3000 Index and serves as a benchmark for U.S. small-cap stocks. The equity securities of small companies may not be traded as often as equity securities of large companies so they may be difficult or impossible to sell.

**International Developed Equity** is defined as The MSCI EAFE Index (Europe, Australasia, Far East), which is a free float-adjusted market capitalization index that is designed to measure the equity performance of 22 developed markets, excluding the U.S. and Canada. The MSCI EAFE Index is commonly used as a benchmark for equities representing the developed world outside of North America. International investing presents certain risks – like currency, custodial, political and transparency risk – not associated with investing solely in the United States.

**International Emerging Market Equity** is defined as The MSCI Emerging Markets Index, which is a free float-adjusted market capitalization index that is designed to measure equity performance in the global emerging markets. Investing in emerging markets involves greater risk than investing in more established markets due to exchange rate changes, political and economic upheaval, and low market liquidity.

**Real Estate** is defined as The FTSE NAREIT Equity REIT Index, which includes all equity REITs trading on the NYSE, Euronext and the NASDAQ OMX. Equity REITs are defined as firms that own, manage and lease investment-grade commercial real estate. Investing in a non-diversified fund that concentrates holdings into fewer securities or industries involves greater risk than investing in a more diversified fund. Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

**Commodities** are defined as The Bloomberg Commodity Index TR, which is a diversified benchmark for commodities and is composed of futures contracts on physical commodities. It uses both liquidity data and U.S. dollar-weighted production data in determining the relative quantities of included commodities. No related group of commodities (e.g., energy, precious metals, livestock or grains) may constitute more than 33 percent of the index.

**Standard deviation** is an indicator of the portfolio's volatility around its average annual return. The larger the portfolio's standard deviation, the greater the variability of the portfolio's annual return.

Moderate Allocation Composition		Moderate Allocation
Asset Class	Representative Index	
Cash	Barclays US Treas 1-3 Mo T-Bill	3%
Fixed Income	Barclays US Aggregate Bond TR	32%
U.S. Large Cap Equity	S&P 500 TR	25%
U.S. Small Cap Equity	Russell 2000 TR	10%
International Developed Market Equity	MSCI EAFE GR	15%
International Emerging Market Equity	MSCI EM GR	5%
Real Estate	FTSE NAREIT Equity REIT TR	5%
Commodities	Bloomberg Commodity TR	5%

The returns of the asset allocation example assumes an annual rebalancing back to original weights and the linking of monthly returns.

The results shown are not the actual performance figures for any particular client.

Source of returns: Morningstar Direct. (Jan. 1, 2006 through Dec. 31, 2015)



# The Stabilizing Power of Diversification (2006–2015)

## Conservative Allocation

### Diversification can help you smooth out the market's ups and downs over time.

To create a well-diversified portfolio, consider spreading your equity holdings among growth, value, small-cap, large-cap and international stocks; balancing your fixed-income holdings among different types of bonds; and adding specialty holdings such as REITs and commodities. The chart shows the year-by-year returns of several broad-based asset classes since 2006. Notice how the Diversified Portfolio (yellow), composed using indexes of all asset classes listed and rebalanced annually, was a more consistent performer than the individual asset classes.

For investors, a well-diversified portfolio can often alleviate concerns about being invested in the right place at the right time. Properly allocating your assets among various asset classes and diversifying your portfolio among several investment vehicles are methods designed to provide you with an efficiently diversified portfolio strategy that reduces volatility.

### About the chart

The historical performance of each representative index cited is provided to illustrate market trends; it does not represent the performance of a particular investment product. Past performance does not guarantee future results. Index performance does not reflect the deduction of any investment-related fees and expenses. It is not possible to invest directly in an index. Asset allocation/diversification of your overall investment portfolio does not assure a profit or protect against a loss in declining markets.



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Annualized Return	Standard Deviation
35.06	39.82	5.24	79.02	27.96	8.29	18.63	38.82	30.14	3.20	7.41	25.48
32.55	16.23	1.77	32.46	26.85	7.84	18.06	32.39	13.69	1.38	7.31	15.06
26.86	11.63	-15.09	27.99	19.20	2.11	17.90	23.29	5.97	0.55	6.80	19.78
18.37	7.69	-33.79	27.17	16.83	1.85	16.35	7.61	5.52	0.03	5.21	7.54
15.79	6.97	-35.65	26.46	15.06	0.07	16.00	2.47	4.89	-0.39	4.51	3.22
11.86	5.49	-37.00	18.91	11.03	-4.18	8.98	0.05	0.02	-1.57	3.95	23.60
4.80	4.78	-37.73	17.96	8.21	-11.73	4.21	-2.02	-1.82	-4.41	3.50	18.49
4.33	-1.57	-43.06	5.93	6.54	-13.32	0.08	-2.27	-4.48	-14.60	1.17	0.55
2.07	-15.69	-53.18	0.15	0.13	-18.17	-1.06	-9.52	-17.01	-24.66	-6.43	18.16



**Cash** is defined as The Barclays US Treasury Bill 1-3 Month TR Index, which is an unweighted index that measures the performance of one- to three-month maturity of U.S. Treasury bills.

**Fixed Income** is defined as The Barclays Aggregate Bond Index, which covers the U.S. investment grade fixed-rate bond markets, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. Investing in fixed-income securities involves credit and interest rate risk. When interest rates rise, bond prices generally fall.

**Domestic Large Cap Equity** is defined as The S&P 500 Index, which is a free-float market capitalization index of the 500 largest publicly held U.S.-based companies, capturing 75-percent coverage of U.S. equities. It is often used as a proxy for the American stock market.

**Domestic Small Cap Equity** is defined as The Russell 2000 Index, which measures the performance of the smallest 2,000 U.S.-based companies in the Russell 3000 Index and serves as a benchmark for U.S. small-cap stocks. The equity securities of small companies may not be traded as often as equity securities of large companies, so they may be difficult or impossible to sell.

**International Developed Equity** is defined as The MSCI EAFE Index (Europe, Australasia, Far East), which is a free float-adjusted market capitalization index that is designed to measure the equity performance of 22 developed markets, excluding the U.S. and Canada. The MSCI EAFE Index is commonly used as a benchmark for equities representing the developed world outside of North America. International investing presents certain risks – like currency, custodial, political and transparency risk – not associated with investing solely in the United States.

**International Emerging Market Equity** is defined as The MSCI Emerging Markets Index, which is a free float-adjusted market capitalization index that is designed to measure equity performance in the global emerging markets. Investing in emerging markets involves greater risk than investing in more established markets due to exchange rate changes, political and economic upheaval, and low market liquidity.

**Real Estate** is defined as The FTSE NAREIT Equity REIT Index, which includes all equity REITs trading on the NYSE, Euronext and the NASDAQ OMX. Equity REITs are defined as firms that own, manage and lease investment-grade commercial real estate. Investing in a non-diversified fund that concentrates holdings into fewer securities or industries involves greater risk than investing in a more diversified fund. Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

**Commodities** are defined as The Bloomberg Commodity Index TR, which is a diversified benchmark for commodities and is composed of futures contracts on physical commodities. It uses both liquidity data and U.S. dollar-weighted production data in determining the relative quantities of included commodities. No related group of commodities (e.g., energy, precious metals, livestock or grains) may constitute more than 33 percent of the index.

**Standard deviation** is an indicator of the portfolio's volatility around its average annual return. The larger the portfolio's standard deviation, the greater the variability of the portfolio's annual return.

Conservative Allocation Composition		Conservative Allocation
Asset Class	Representative Index	
Cash	Barclay's US Tre as 1-3 Month T-Bill	3%
Fixed Income	Barclays US Aggregate Bond TR	52%
U.S. Large Cap Equity	S&P 500 TR	15%
U.S. Small Cap Equity	Russell 2000 TR	5%
International Developed Market Equity	MSCI EAFE GR	10%
International Emerging Market Equity	MSCI EM GR	5%
Real Estate	FTSE NAREIT Equity REIT TR	5%
Commodities	Bloomberg Commodity TR	5%

The returns of the asset allocation example assumes an annual rebalancing back to original weights and the linking of monthly returns.

The results shown are not the actual performance figures for any particular client.

Source of returns: Morningstar Direct. (Jan. 1, 2006 through Dec. 31, 2015)



# The Stabilizing Power of Diversification (2006–2015)

## Ultra Conservative Allocation

### Diversification can help you smooth out the market's ups and downs over time.

To create a well-diversified portfolio, consider spreading your equity holdings among growth, value, small-cap, large-cap and international stocks; balancing your fixed-income holdings among different types of bonds; and adding specialty holdings such as REITs and commodities. The chart shows the year-by-year returns of several broad-based asset classes since 2006. Notice how the Diversified Portfolio (yellow), composed using indexes of all asset classes listed and rebalanced annually, was a more consistent performer than the individual asset classes.

For investors, a well-diversified portfolio can often alleviate concerns about being invested in the right place at the right time. Properly allocating your assets among various asset classes and diversifying your portfolio among several investment vehicles are methods designed to provide you with an efficiently diversified portfolio strategy that reduces volatility.

### About the chart

The historical performance of each representative index cited is provided to illustrate market trends; it does not represent the performance of a particular investment product. Past performance does not guarantee future results. Index performance does not reflect the deduction of any investment-related fees and expenses. It is not possible to invest directly in an index. Asset allocation/diversification of your overall investment portfolio does not assure a profit or protect against a loss in declining markets.



2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Annualized Return	Standard Deviation
35.06	39.82	5.24	79.02	27.96	8.29	18.63	38.82	30.14	3.20	7.41	25.48
32.55	16.23	1.77	32.46	26.85	7.84	18.06	32.39	13.69	1.38	7.31	15.06
26.86	11.63	-8.11	27.99	19.20	4.04	17.90	23.29	5.97	0.55	6.80	19.78
18.37	6.97	-33.79	27.17	16.83	2.11	16.35	3.86	5.57	0.03	4.72	5.34
15.79	6.55	-35.65	26.46	15.06	0.07	16.00	2.47	4.89	-0.39	4.51	3.22
9.17	5.49	-37.00	18.91	8.95	-4.18	7.07	0.05	0.02	-0.60	3.95	23.60
4.80	4.78	-37.73	12.22	8.21	-11.73	4.21	-2.02	-1.82	-4.41	3.50	18.49
4.33	-1.57	-43.06	5.93	6.54	-13.32	0.08	-2.27	-4.48	-14.60	1.17	0.55
2.07	-15.69	-53.18	0.15	0.13	-18.17	-1.06	-9.52	-17.01	-24.66	-6.43	18.16

**Cash** is defined as The Barclays US Treasury Bill 1-3 Month TR Index, which is an unweighted index that measures the performance of one- to three-month maturity of U.S. Treasury bills.

**Fixed Income** is defined as The Barclays Aggregate Bond Index, which covers the U.S. investment grade fixed-rate bond markets, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. Investing in fixed-income securities involves credit and interest rate risk. When interest rates rise, bond prices generally fall.

**Domestic Large Cap Equity** is defined as The S&P 500 Index, which is a free-float market capitalization index of the 500 largest publicly held U.S.-based companies, capturing 75-percent coverage of U.S. equities. It is often used as a proxy for the American stock market.

**Domestic Small Cap Equity** is defined as The Russell 2000 Index, which measures the performance of the smallest 2,000 U.S.-based companies in the Russell 3000 Index and serves as a benchmark for U.S. small-cap stocks. The equity securities of small companies may not be traded as often as equity securities of large companies, so they may be difficult or impossible to sell.

**International Developed Equity** is defined as The MSCI EAFE Index (Europe, Australasia, Far East), which is a free float-adjusted market capitalization index that is designed to measure the equity performance of 22 developed markets, excluding the U.S. and Canada. The MSCI EAFE Index is commonly used as a benchmark for equities representing the developed world outside of North America. International investing presents certain risks – like currency, custodial, political and transparency risk – not associated with investing solely in the United States.

**International Emerging Market Equity** is defined as The MSCI Emerging Markets Index, which is a free float-adjusted market capitalization index that is designed to measure equity performance in the global emerging markets. Investing in emerging markets involves greater risk than investing in more established markets due to exchange rate changes, political and economic upheaval, and low market liquidity.

**Real Estate** is defined as The FTSE NAREIT Equity REIT Index, which includes all equity REITs trading on the NYSE, Euronext and the NASDAQ OMX. Equity REITs are defined as firms that own, manage and lease investment-grade commercial real estate. Investing in a non-diversified fund that concentrates holdings into fewer securities or industries involves greater risk than investing in a more diversified fund. Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

**Commodities** are defined as The Bloomberg Commodity Index TR, which is a diversified benchmark for commodities and is composed of futures contracts on physical commodities. It uses both liquidity data and U.S. dollar-weighted production data in determining the relative quantities of included commodities. No related group of commodities (e.g., energy, precious metals, livestock or grains) may constitute more than 33 percent of the index.

**Standard deviation** is an indicator of the portfolio's volatility around its average annual return. The larger the portfolio's standard deviation, the greater the variability of the portfolio's annual return.

Ultra Conservative Allocation Composition		Ultra Conservative Allocation
Asset Class	Representative Index	
Cash	Barclay's US Tre as 1-3 Month T-Bill	3%
Fixed Income	Barclays US Aggregate Bond TR	67%
U.S. Large Cap Equity	S&P 500 TR	10%
U.S. Small Cap Equity	Russell 2000 TR	-
International Developed Market Equity	MSCI EAFE GR	10%
International Emerging Market Equity	MSCI EM GR	-
Real Estate	FTSE NAREIT Equity REIT TR	5%
Commodities	Bloomberg Commodity TR	5%

The returns of the asset allocation example assumes an annual rebalancing back to original weights and the linking of monthly returns.

The results shown are not the actual performance figures for any particular client.

Source of returns: Morningstar Direct. (Jan. 1, 2006 through Dec. 31, 2015)

