



## SPEAKING OF MARKETS

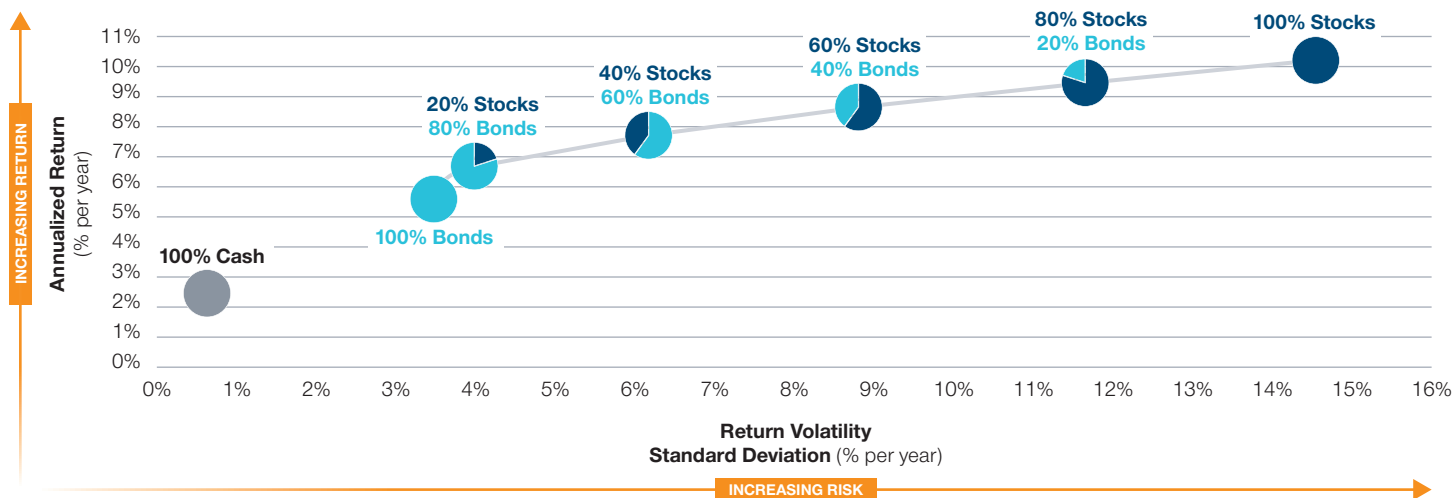
### MANAGE RISK IN YOUR PORTFOLIO

There isn't a bulletproof investment that will safeguard your portfolio from market volatility and provide the growth potential needed to achieve your goals. An asset allocation strategy that aligns to your time horizon and your risk tolerance can help defend against market fluctuations.

The chart below shows that, historically, adding bonds to an all-stock portfolio could help dampen overall portfolio volatility and still provide attractive long-term growth potential.

#### RETURN VOLATILITY

25-years Ended December 31, 2019



Asset allocation becomes even more important as you get closer to retirement, which could last 30 years or more. A balanced approach to investing allows you to take advantage of the growth potential offered by stocks while mitigating stock market volatility with bonds.

As the chart below shows, portfolios with a higher percentage of stocks were more likely to experience dramatic short-term gains and losses than their bond-heavy counterparts. Over time, however, portfolios with a blend of stocks and bonds tended to offer higher returns than an all-bond portfolio with less volatility than an all-stock portfolio.

#### PORTFOLIO PERFORMANCE

25-years Ended December 31, 2019

	100% Bonds	20% Stocks / 80% Bonds	40% Stocks / 60% Bonds	60% Stocks / 40% Bonds	80% Stocks / 20% Bonds	100% Stocks
Return for Best Year	18.5%	22.1%	25.8%	29.7%	33.6%	37.6%
Return for Worst Year	-2.0%	-4.6%	-13.7%	-22.1%	-29.8%	-37.0%
Average Annual Nominal Return	5.6%	6.7%	7.7%	8.6%	9.5%	10.2%
Number of Down Years	2	2	3	5	5	5
Average Loss (in Down Years)	-1.4%	-2.6%	-6.2%	-7.8%	-12.4%	-16.9%

These hypothetical portfolios combine stocks and bonds to represent a range of potential risk/reward profiles. For each allocation model, historical data are shown to represent how the portfolios would have fared in the past. Figures include changes in principal value and reinvested dividends and assume the portfolios are rebalanced monthly. It is not possible to invest directly in an index. **Past performance cannot guarantee future results.**

Charts are shown for illustrative purposes only and do not represent the performance of any specific security or T. Rowe Price product.

Sources: T. Rowe Price, created with Zephyr StyleADVISOR; S&P; Bloomberg Barclays Index Ltd.; FTSE. See Additional Disclosures. Stocks, S&P 500 Index; bonds, Bloomberg Barclays U.S. Aggregate Bond Index; cash, FTSE 3 month T-Bill.



## CHART A STEADY COURSE

Taking your investment time horizon and risk tolerance into account, asset allocation should identify an appropriate mix of stocks, bonds, and cash to help reduce your portfolio's volatility, minimize losses, and maximize overall gains. Diversification involves spreading investments within asset classes to reduce dependence on a single category. For instance, investing in different types of stocks (small-cap, large-cap, international, etc.) and bonds (international, high-yield, and investment grade) so your portfolio is never too dependent on any one asset type.

The table below shows how multiple stock and bond indexes performed over a 10-year period. While it's tempting to chase categories with double-digit gains, it is important to remember that many of those same categories experienced double-digit losses in other years. The pie charts in the table show how a diversified portfolio with a 60% stock/40% bond allocation performed each year over the 10-year period. The diversified portfolio had only a few years of negative performance, and it still outperformed many other sectors in those down years. Even in those down years it still outperformed the majority of the other sectors.

Of course, diversification cannot assure a profit or protect against loss in a declining market, but a well diversified portfolio could offer exposure to higher-performing sectors without being derailed by poor-performing categories.

### INVESTORS CAN BENEFIT FROM DIVERSIFICATION

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
26.85%	8.46%	19.60%	38.82%	13.24%	1.23%	21.31%	37.28%	0.01%	31.43%
18.88%	7.84%	18.54%	33.11%	<b>5.98%</b>	0.92%	14.27%	25.03%	-2.15%	25.52%
16.10%	4.36%	18.22%	22.78%	5.97%	0.55%	12.05%	21.69%	-4.06%	22.01%
14.82%	3.12%	17.32%	<b>15.94%</b>	5.53%	<b>-0.43%</b>	11.19%	<b>15.48%</b>	-4.61%	<b>20.34%</b>
<b>12.73%</b>	1.50%	16.42%	7.33%	4.89%	-0.81%	10.19%	14.65%	-4.78%	18.42%
12.04%	<b>0.89%</b>	16.35%	-2.02%	0.01%	-2.72%	<b>8.01%</b>	10.51%	<b>-5.11%</b>	14.42%
7.75%	-4.18%	<b>13.01%</b>	-2.60%	-2.19%	-4.41%	2.65%	10.43%	-11.01%	12.56%
6.54%	-12.14%	4.21%	-3.08%	-3.08%	-6.02%	1.49%	9.32%	-13.79%	8.72%
4.95%	-18.42%	4.09%	-6.58%	-4.90%	-14.92%	1.00%	3.54%	-14.58%	5.09%

Representative Index	Asset Class/Sector	Diversified Portfolio Allocation
Russell 1000 Index	U.S. Equity Large-Cap	36%
Russell 2000 Index	U.S. Equity Small-Cap	6%
MSCI EAFE Index	Developed International Equity	15%
MSCI EM (Emerging Markets) Index	Emerging Markets Equity	3%
Bloomberg Barclays U.S. Aggregate Index	U.S. Investment-Grade Bonds	28%
Bloomberg Barclays Global High Yield Index	High Yield Bonds	4%
Bloomberg Barclays Global Aggregate Ex-USD Bond Index	International Bonds	4%
J.P. Morgan Emerging Markets Bond Index Global	Emerging Market Bonds	4%
Diversified Portfolio	Asset Allocation	-

The Diversified Portfolio assumes the following weights: 60% stocks and 40% bonds represented by the indices above and assumes monthly rebalancing. Data as of 12/30/19.

#### Additional Disclosures:

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