

Diversification and market volatility

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Your retirement plan gives you the ability to invest in a wide variety of asset classes. With financial markets in constant motion, you'll want to strive to have a balanced portfolio to help you mitigate risk.

Change is the only constant

Certain asset classes, or types of investments, such as equities (stocks), have the potential to deliver higher returns over time. That potential comes with a greater risk of loss in the short term and the chance for more volatility of each single investment class.

Sometimes the best-performing asset class one year becomes the poorest performer the next year and vice versa—look at the emerging markets equity and bonds returns in the table below.¹ Over this 10-year period, emerging markets had five years of positive returns, while bonds had nine years of positive returns. Both had volatility. However, you have to look at the percentage of change to understand the true movement.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
∠ Lower return Higher return	Emerging Market Equity 78.51%	Small-Cap 26.85%	TIPS 13.56 %	Emerging Market Equity 18.22%	Small-Cap 38.82%	S&P 500 13.69 %	Large Growth 5.67 %	Small-Cap 21.31%	Emerging Market Equity 37.28%	Bonds 0.01 %
	High-Yield Bond 58.21 %	Mid-Cap 25.48 %	Bonds 7.8 4%	Large Value	Mid-Cap 34.76 %	Large Value 13.45%	S&P 500 1.38 %	Large Value 17.34%	Large Growth 30.21%	IPS - 1.26 %
	Mid-Cap 40.48 %	Emerging Market Equity 18.88%	Hign-Yield Bond 4.98%	International Stocks 17.32%	Large Growth 33.48 %	Mid-Cap 13.22%	Bonds 0.55 %	High-Yield Bond 17.13 %	International Stocks 25.03%	Large Growth -1.51%
	Large Growth 37.21 %	Large Growth 16.71 %	Large Growth 2.64%	Mid-Cap 17.28%	Large Value 32.53%	Large Growth 13.05%	International Stocks -0.81%	Mid-Cap 13.80%	S&P 500 21.83 %	High-Yield Bond -2.08 %
	International Stocks 31.78%	Large Value 15.51%	S&P 500 2.11%	Small-Cap 16.35%	S&P 500 32.39 %	60/40 Div Portfolio 6.39%	TIPS -1.44%	S&P 500 11.96 %	Mid-Cap 18.52 %	S&P 500 -4.38%
	60/40 Div Portfolio 27.65 %	High-Yield Bond 15.12 %	60/40 Div Portfolio 1.41 %	S&P 500 16.00 %	International Stocks 22.78%	Boylds 5.97%	60/40 Div Portfolio -1.46%	Emerging Market Equity 11.19%	60/40 Div Portfolio 15.20 %	60/40 Div Portfolio -5.60%
	Small-Cap 27.17 %	S&P 500 15.06 %	Large Value 0.39%	High-Yield Bond 15.81 %	60/40 Div Portfolio 15.85 %	Small-Cap 4.89%	Mid-Cap -2.44%	60/40 Div Portfolio 8.57%	Small-Cap 14.65%	l.arge Value -8.27%
	S&P 500 26.46%	60/40 Div Portfolio 13.25%	Mid-Cap -1.55%	Large Growth 15.26 %	High-Yield Bond 7.44%	TIPS 3.64%	Large Value -3.83%	Large Growth 7.08%	Large Value 13.66%	Mid-Cap 9.06 %
	Large Value 19.69%	International Stocks 7.75%	9mall-Cap •4.18%	60/40 Div Portfolio 12.96 %	E or.ds -2 02%	High-Yield Bond 2.45 %	Small-Cap -4.41%	TIPS 4 68%	High-Yi <mark>e</mark> ld Bond 7.50 %	Small-Cap -11.01%
	TIPS 11.41%	Borids 9.54 %	International Stocks -12.14%	TIPS 6.98%	Emerging Market Equity -2.60%	Emerging Market Equity -2.19%	High-Yie'd Bond -4.47'%	Bonds 2.65 %	Bor ds 3.54 %	International Stocks -13.79%
	Borus 5.93%	TIPS 6.31%	Emerging Market Equity -18.42%	Boyds 4.21%	TIPS -8.61%	International Stocks -4.90%	Emerging Market Equity -14.92%	International Stocks 1.00%	TIPS 3.01%	Emerging Market Equity -14.58%

¹Morningstar Investment Management, LLC, a wholly owned subsidiary of Morningstar, Inc., 2018. Past performance does not guarantee future returns.

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By holding different investment types in your portfolio, the upswing of one may help offset the downward movement of another as market conditions change. Learn more about what the markets are doing today at TIAA.org/market-commentary.

- Standard & Poor's 500® Index (S&P 500) is an unmanaged, market-cap-weighted index of 500 common stocks selected for their market size, liquidity and industry group representation within the U.S. equity market.
- Large Growth uses the Russell 1000® Growth Index, which measures the performance of Russell 1000® companies with higher price-to-book ratios and higher forecasted growth values.
- Large-Cap Value uses the Russell 1000® Value Index, which measures the performance of Russell 1000® companies with lower price-to-book ratios and lower forecasted growth values.
- Mid-Cap uses the Russell Midcap Index, which consists of the smallest 800 companies in the Russell 1000® Index as ranked by total market capitalization. This mid-cap index represents approximately 26% of the Russell 1000® total market capitalization.
- Small-Cap uses the Russell 2000® Index, which consists of the smallest 2,000 companies in the Russell 3000® Index, representing approximately 8% of the Russell 3000® total market capitalization.
- International Stocks use the MSCI EAFE Index (Europe, Australasia, Far East), which is a free-float adjusted market capitalization index designed to measure developed market equity performance, excluding the United States and Canada.

- Emerging Markets Equity uses the MSCI Emerging Markets Index, which measures equity market performance in global emerging markets. It is a float-adjusted market capitalization index. It consists of indexes in 24 emerging economies.
- Bonds use the Barclays U.S. Aggregate Bond Index as the benchmark index. It is made up of the Barclays Government/Corporate Bond Index, Mortgage-Backed Securities Index and Asset-Backed Securities Index, and includes securities of investment-grade quality that have at least one year to maturity and an outstanding par value of at least \$100 million.
- TIPS uses the Barclays U.S. Treasury
 Inflation-Protected Securities Index (Series L),
 which measures the performance of the U.S.
 Treasury Inflation-Protected Securities ("TIPS")
 market. The index includes TIPS with one or more
 years remaining to maturity and total outstanding
 issue size of \$500 million or more.
- **High-Yield Bond** uses the Barclays High-Yield Index, which covers the U.S. dollar-denominated, non-investment-grade fixed-rate taxable corporate bond market. Only securities with more than one year to maturity qualify for inclusion in the index.
- 60/40 Diversified Portfolio uses a combination and allocation weighting of the following indices: Russell 1000 Growth TR USD (13%), Russell 1000 Value TR USD (14%), Bloomberg Barclays US Aggregate Bond TR USD (19%), Bloomberg Barclays US Treasury US TIPS TR USD (15%), Russell Mid-Cap TR USD (12%), Russell 2000 TR USD (3%), Bloomberg Barclays US Corporate High-Yield TR USD (6%), MSCI EAFE NR USD (13%) and MSCI EM NR USD (5%).

Sources: Data derived from Morningstar DirectSM, Morningstar, Inc., 2018. Please note that equity returns have historically been higher than other asset classes but carry considerable risk of principal loss. Fixed-income returns have historically been less than equity returns, are subject to interest rate risk, but typically bring greater safety of principal. Indexes are unmanaged statistical composites that measure the various financial markets. An investment cannot be made into an index.

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Diversification is a technique to help reduce risk. There is no guarantee that diversification will protect against loss.

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