

# Morningstar 529 College Savings Index Family

## Learn More

For more information about all of Morningstar's indexes, please visit: <http://indexes.morningstar.com>

## Contact Us

indexes@morningstar.com  
 U.S. +1 312 384-3735  
 Europe +44 20 3194 1082  
 Australia +612 9276 4446  
 Japan +81 3 3239 7701  
 Asia +91 22 61217101

## Introduction to 529 Plans

Planning for college has become increasingly important as the cost of higher education continues to rise. While there are a variety of ways to save for college, 529 college-savings plans continue to be a popular choice. Named after Section 529 of the Internal Revenue Code, 529 plans are tax-advantaged investments, designed to encourage saving for college. These plans typically offer investment options in the form of a "glide path"—a portfolio that automatically alters its asset allocation over time as a student approaches college age.

The value of the plan is only as good as the quality of the underlying investments. Currently there is a wide asset-allocation dispersion across 529 plans' underlying glide paths. This large dispersion in equity allocations suggests there are different perspectives and methodologies when it comes to building the optimal glide path for a 529 plan. Unlike other investments vehicles that have similar investment processes (like target-date mutual funds), there has historically been no benchmark for 529 plans.

## A New Benchmark

Morningstar Indexes has created a family of glide-path indexes specifically for the 529 plan structure. Available in aggressive, moderate, and conservative tracks, this collection of goal-based vintages factor in the unique risks associated with saving for college with Morningstar's experience in portfolio construction.

## Asset Allocation by Ibbotson Associates

The indexes use asset-allocation methodologies developed and maintained by Ibbotson Associates, a leader in asset-allocation research for more than 30 years and a division of Morningstar Investment Management. The 529 allocation strategies, global asset exposures, risk profile, and inflation-hedging features are products of Ibbotson's real-world-tested research.

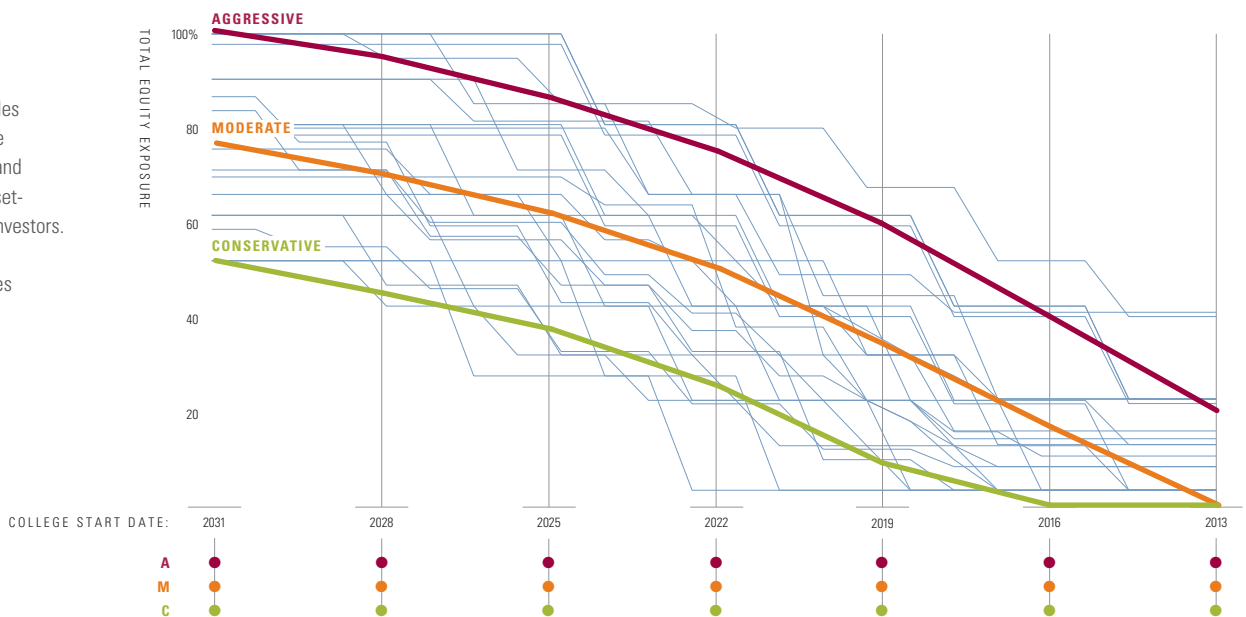
## Asset-Class Exposure by Morningstar Indexes

Morningstar's comprehensive family of equity and fixed-income indexes serve as asset-class proxies. Morningstar Indexes are specifically designed to be seamless, investable building blocks that deliver pure asset-class exposure. Morningstar Indexes cover a global investable universe of stocks and bonds.

## Morningstar® 529 College Savings Index Family

Three distinct risk profiles address a diverse range of 529 plan strategies and provide appropriate asset-allocation choices for investors.

- Morningstar 529 indexes
- Largest 529 plans



## Morningstar 529 College Savings Index Family

### Key Steps in the Methodology

*Step 1*—Define opportunity set, which consists of core equity, fixed-income, and inflation-hedged asset classes.

*Step 2*—Determine the optimal sub-asset-class portfolios using liability-relative optimization.

*Step 3*—Apply implied inflation based on Ibbotson's assumptions.

*Step 4*—Optimize using the mean conditional value-at-risk optimization approach and seek to minimize the downside risk of each target return.

### Risk Profile—One Size Does Not Fit All

The Morningstar 529 College Savings Index Family provides benchmarks for 529 investment plans. The index family offers three different risk profiles to accommodate variations in risk preference and risk capacity—aggressive, moderate, and conservative.

### College Inflation

Forecasting the future change in the costs of college (college inflation) can be a more difficult exercise than forecasting the future movements for more-traditional asset classes, such as large-cap domestic equity or fixed income. This is because college costs tend to have more factors that can affect their future values, and costs will vary not only by college type (public or private, for example), but also by region/state and by individual college. Therefore, the methodology assumes that expected college inflation will be general inflation plus the approximate long-term spread of college inflation over base inflation.

### Annual Reconstitution

Asset-class weightings are adjusted annually to incorporate Ibbotson's updated assumptions. The indexes are rebalanced quarterly and priced daily.

### Morningstar® 529 College Savings Index Family

Each index in the Morningstar 529 Index family provides diversified asset class exposure to global equities, bonds, real estate, and Treasury Inflation-Protected Securities by using existing Morningstar Indexes as asset-allocation building blocks.

#### Equities (Domestic/International)



#### Bonds (Domestic/International)



#### REITS



#### TIPS



Morningstar index components are combined to make up the family of 529 Indexes.

#### 529 Indexes



Aggressive  
Moderate  
Conservative