

# Morningstar® Indexes Methodology Overview

## Average number of stocks in each index since inception

(calculated using number of stocks at each semi-annual reconstitution)

	US Mkt 1970	Value	Core	Growth
Large	225	81	76	68
Mid	672	203	230	239
Small	1073	342	379	352

The Morningstar Index family consists of 16 indexes that track the U.S. market by capitalization and investment style to create an integrated system. The indexes were built using a comprehensive and non-overlapping approach, based on the methodology of the Morningstar Style Box™.

## Index Eligibility

Index constituents are drawn from the available pool of liquid, U.S. domiciled stocks that trade on one of the three major exchanges. The following security types are excluded: American Depositary Receipts; bulletin board stocks; convertible notes, warrants and rights; limited partnerships.

## Liquidity Requirement

Securities that have more than ten non-trading days in the prior quarter or that have average daily trading volume over preceding six-months that falls in the bottom quartile are excluded.

## Constituent Weighting

Index constituents are weighted according to their free float of shares outstanding. The free float is defined as a company's outstanding shares adjusted for block ownership to reflect only shares available for investment. The types of block ownership that are considered during float adjustment are cross ownership, government ownership, private ownership and restricted shares.

## Stability Buffers

To help ensure that index turnover reflects significant events, stocks are reclassified in terms of style or capitalization only if they move sufficiently beyond the break point between styles (value-core or core-growth break points) or capitalization (large-mid or mid-small). The range in which a stock movement is permitted without impacting the classification is called the buffer zone. Short-term movements of stocks into or within the buffer zones do not result in index turnover.

## Rebalancing & Reconstitution

Morningstar rebalances constituent shares and weights of its indexes quarterly in March, June, September, and December. Immediate rebalancing occurs if two constituents merge or a company's free-float changes by 10% or more. The indexes are reconstituted (stocks are added or removed from the indexes) twice annually in June and December.

## Morningstar Index Construction Process

- ▶ The index construction begins by defining the "investable portion" of the U.S. equity market.
- ▶ Next liquidity screens are applied to create the Morningstar US Market Index, which targets 97% of the total capitalization of the U.S. market.
- ▶ The Morningstar US Market Index is divided into three market cap indexes by defining each as a percentage of the market capitalization of the investable universe.

## Overview of the Index Family

### Broad Market Index

US Market



Targets 97% market capitalization coverage

### Cap Indexes

Large



Mid



Small



Large Cap: 70% market capitalization  
Mid Cap: 20% market capitalization  
Small Cap: 7% market capitalization

### Composite Style Indexes

Value



Core



Growth



Value, Core, and Growth indexes are defined by 10 variables. Each index represents approximately 1/3 of the overall market.

### Style Indexes

Large Value



Large Core



Large Growth



Mid Value



Mid Core



Mid Growth



Small Value



Small Core



Small Growth



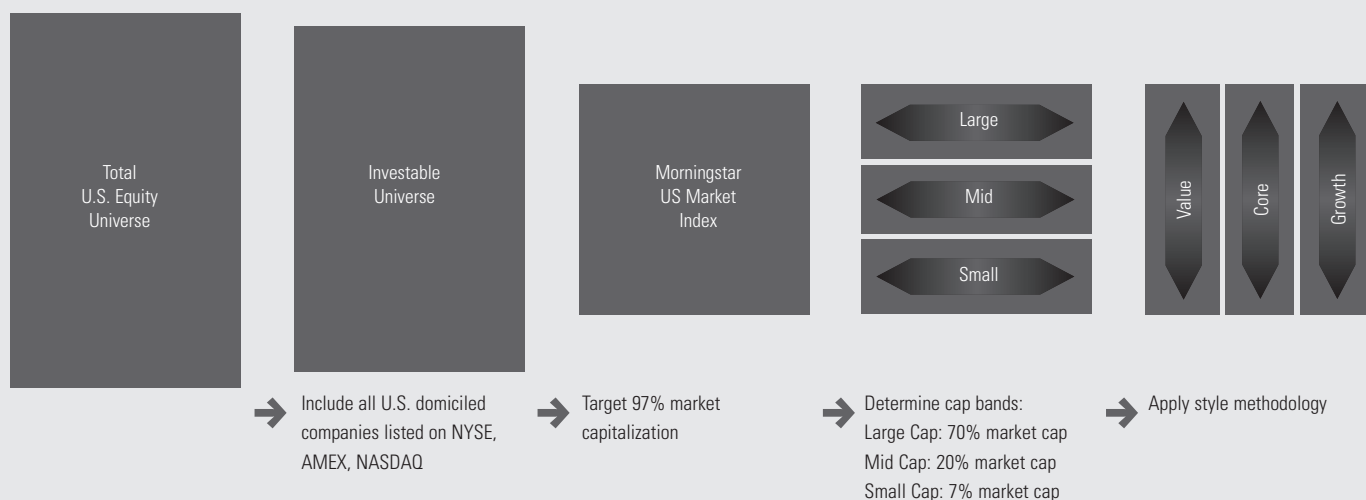
The nine segments of the well known Style Box are specified by style and market capitalization.

# Morningstar® Indexes Methodology Overview

## Determining a Stock's Style

- ▶ Within each capitalization class, index constituents are assigned to one of three style orientations—value, growth or core—based on the stock's overall style score.
- ▶ A stock's style score is determined by separately measuring a stock's value and growth characteristics using related but distinct historical and forward-looking variables, each accounting for one half of a stock's style score. After calculating value and growth scores, they are compared to determine whether value or growth characteristics dominate. If the value-growth scores are not sufficiently different, the stock is designated core.
- ▶ Breakpoints for value, core and growth styles are set so that the average weight of each style over time represents approximately one-third of the investable universe within the capitalization class.

## Morningstar Index Construction Process



## Determining a Stock's Style

### 1. Determine a Value Score

Factors		Weight %
Forward-Looking	Price-to-Projected Earnings	50.0
Historical:	Price-to-Book	12.5
	Price-to-Sales	12.5
	Price-to-Cash Flow	12.5
	Dividend Yield	12.5

### 2. Determine a Growth Score

Factors		Weight %
Forward-Looking	Long Term Projected Earnings Growth	50.0
Historical:	Earnings Growth	12.5
	Sales Growth	12.5
	Cash Flow Growth	12.5
	Book Value Growth	12.5

### 3. Determine a Style Score

Subtract the value score from the growth score.

Growth Score	0 to 100
Value Score	0 to 100
Style Score	-100 to 100

