

Bloomberg US Domestic Equity Indices Methodology

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Bloomberg

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INTRODUCTION

The Bloomberg US Equity Index family includes all investable companies in the U.S. The Bloomberg US Aggregate Equity Index (AGGE) represents approximately 99% of the US market by capitalization. The market size indices (B500, B200, B400, B600, B900, B1000, B1500, B2000, B2500, B3000, BMIC) are free-float market-capitalization-weighted Index. The indices follow the weekday calendar.

Changes in the methodology may be necessary to help ensure representativeness, accuracy or integrity. Material changes to the methodology are reviewed and approved by the Bloomberg Product, Risk and Operations Committee (PROC). Bloomberg will provide reasonable notice to its clients of any planned changes along with the rationale for any changes.

INDEX CONSTRUCTION OVERVIEW

The Indices are constructed in a three-step process: (1) eligibility universe definition, (2) liquidity screening and (3) segmentation on the selection date. The Index is rebalanced following the selection date in March and September. Additionally, Index constituents' weights will be updated in June and December.

Name	Ticker
Bloomberg US Aggregate Equity Price Return / Total Return / Net Return	AGGE / AGGET / AGGENT
Bloomberg US Large Cap Price Return / Total Return / Net Return	B500 / B500T / B500N
Bloomberg US Large Cap Value Price Return / Total Return / Net Return	B500V / B500VT / B500VN
Bloomberg US Large Cap Growth Price Return / Total Return / Net Return	B500G / B500GT / B500GN
Bloomberg US Large Cap Dividend Yield Price Return / Total Return / Net Return	B500D / B500DT / B500DN
Bloomberg US 200 Price Return / Total Return / Net Return	B200 / B200T / B200N
Bloomberg US 400 Price Return / Total Return / Net Return	B400P / B400T / B400N
Bloomberg US 600 Price Return / Total Return / Net Return	B600P / B600T / B600N
Bloomberg US 900 Price Return / Total Return / Net Return	B900P / B900T / B900N
Bloomberg US 1000 Price Return / Total Return / Net Return	B1000 / B1000T / B1000N
Bloomberg US 1000 Growth Price Return / Total Return / Net Return	B1000G / B1000GT / B1000GN
Bloomberg US 1000 Value Price Return / Total Return / Net Return	B1000V / B1000VT / B1000VN
Bloomberg US 1500 Price Return / Total Return / Net Return	B1500P / B1500T / B1500N
Bloomberg US 2000 Price Return / Total Return / Net Return	B2000 / B2000T / B2000N
Bloomberg US 2000 Value Price Return / Total Return / Net Return	B2000V / B2000VT / B2000VN
Bloomberg US 2000 Growth Price Return / Total Return / Net Return	B2000G / B2000GT / B2000GN
Bloomberg US 2500 Price Price Return / Total Return / Net Return	B2500 / B2500T / B5000N
Bloomberg US 2500 Value Price Return / Total Return / Net Return	B2500V / B2500VT / B5000VN
Bloomberg US 2500 Growth Price Return / Total Return / Net Return	B2500G / B2500GT / B2500GN
Bloomberg US 3000 Price Return / Total Return / Net Return	B3000 / B3000T / B3000N
Bloomberg US 3000 Value Price Return / Total Return / Net Return	B3000V / B3000VT / B3000VN
Bloomberg US 3000 Growth Price Return / Total Return / Net Return	B3000G / B3000GT / B3000GN
Bloomberg US Mid Cap Price Return / Total Return / Net Return	BMID / BMIDT / BMIDN
Bloomberg US Micro Cap Price Return / Total Return / Net Return	BMIC / BMICT / BMICN

CONSTITUENT SELECTION & WEIGHTING

Aggregate Index

The following outlines the steps taken to determine Index membership:

Eligibility Screening

To be eligible for the Index, a security must meet all criteria below. The eligibility screening is applied on each selection date.

Criteria	Application	Bloomberg Formula
Country Definition	All securities with primary listing of United States with either: 1) Bloomberg Country of Risk of United States, or 2) Domiciled in Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Republic of Ireland, Isle of Man, Jersey, Luxembourg, Monaco, Netherlands, Panama, Puerto Rico, Singapore or Switzerland.	(EQY_PRIM_SECURITY_COMP_EXCH = US) AND ((CNTRY_OF_RISK = US) OR (CNTRY_OF_DOMICILE= BS, BM, VG, KY, IE, IM, JE, LU, MC, NL, PA, PR, SG, CH))
Primary Listing	All securities primarily listed in the following U.S. exchanges: NYSE, NYSE American, NYSE ARCA, IEX, NASDAQ CM, NASDAQ GS, NASDAQ GM and CBOE BZX.	EQY_PRIM_EXCH_SHRT = UN, UA, UP, VF, UR, UW, UQ, UF
Security Type	Includes: Common Stock, Real Estate Investment Trusts, and Tracking Stock. Excludes: Depositary Receipts, Preferred and Convertible Preferred Stock, Units, Rights, and Warrants.	SECURITY_TYP = Common Stock, REIT, or Tracking Stock Discretion will be used to exclude securities that trade as common stock but BISL deems ineligible due to their characteristics.
Organization Type	Excludes: Business Development Companies, Closed-End Investment Companies, ETFs and ETNs, LLCs, Partnerships, Royalty Trusts, Special Purpose Acquisition Companies, and Special Purpose Vehicles.	BICS_LEVEL_3_INDUSTRY_NAME <> Investment Companies, and <> Private Equity
Minimum Free-Float Shares Screening	Free-Float Share must be minimum 10.0% of the total shares outstanding.	EQY_FREE_FLOAT_PCT >= 10%

Liquidity Screening

Once the Index-eligible universe is defined, liquidity screens are applied. The liquidity screening is applied on each selection date.

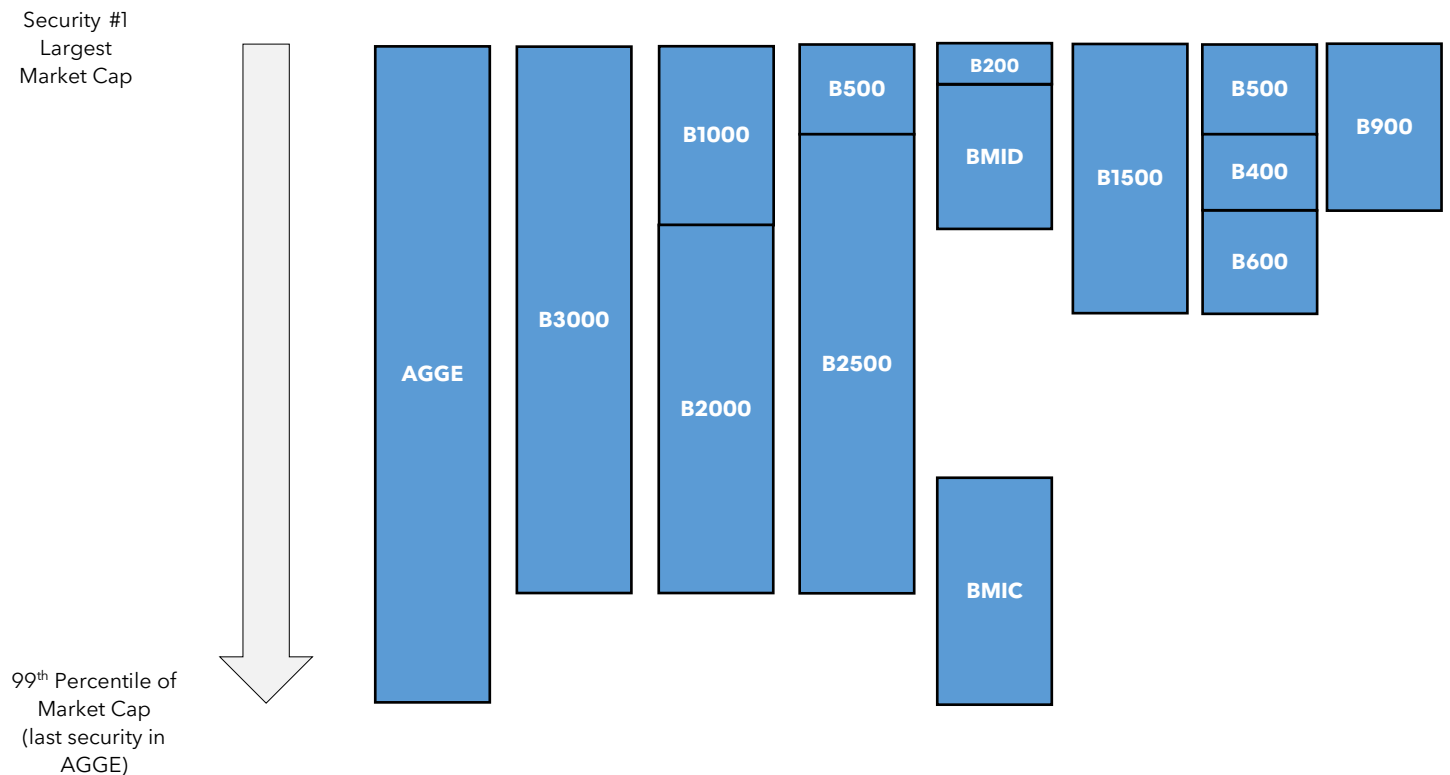
Step	Action	Criteria	Application	Formula
1	Market & Status Screening	Trading Regular Way	When-Issued securities excluded.	WHEN_ISSUED = N
		Minimum Trading Volume	Ratio of 100-day average trading volume and float shares greater than 0.001. Does not apply to index members that have been trading for less than 100-days, e.g., fast-track IPOs.	VOLUME_AVG_100D / EQY_FLOAT > 0.001
	Consecutive Trading Days Requirement	<p>If the composite price or primary exchange price is unavailable for 10 or more consecutive trading days since the security has been a part of the Eligible Universe, the security will not be included in the Index. Any trading day that the security had a TRADE_STATUS = N will be excluded from the 10 trading days.</p> <p>This rule does not apply to recent additions to the eligible universe such as Fast Track IPOs and Spun-off securities that have been trading for less than 10 days.</p>	<p>Excluding Fast Track IPOs and Spun-off securities, for all trading days since its inclusion in the eligible universe, the number of missing price days should be less than 10 days.</p> <p>Missing price day is any day that the security did not have a primary or composite price and the TRADE_STATUS = Y</p>	
		Suspended Security	Generally, a Suspended security won't be considered for inclusion and a security Suspended after selection date but before Reconstitution will not be added to the Index on the Reconstitution. However, under certain circumstances, after further review, suspended securities may be included.	Exclude if TRADE_STATUS = N
		Seasoning of Securities	<p><i>Newly listed securities must have been ranked among the top 500 issuers for their first 5 consecutive days of trading . Fast Track IPOs and Spun-off securities that are already in the index are exceptions to this rule, as they may have not traded for 3 months at the time of the Reconstitution.</i></p> <p><i>Fast track new addition rule:</i> IPOs that rank by market capitalization in the top 500 companies during the intra-rebalance period will be added with a 3-day notice period as long as they have been trading for a minimum of 5 days and have been ranked among the top 500 securities for 5 consecutive trading days over the course of the intra-rebalance period.</p>	<p>Excluding Fast Track IPOs and Spun-off securities, on Selection Date (S_{date}) only include securities for which</p> $S_{date} - \text{Date of first trade} \Rightarrow 3 \text{ Months}$ <p>For any trading date t: If, $t_{date} - \text{'Date of first trade'} \Rightarrow 5$ trading days, add security to the Index on the 6th trading day if security's float market capitalization ranks among top 500 for 5 consecutive trading days.</p>

			At the subsequent semi-annual Reconstitution, such Fast Track new additions will continue to stay in the Index even if they are not among the top 500 securities by market capitalization as long as they meet all eligibility and liquidity criteria.	
		Price	A security new to the Aggregate Index must have a closing exchange price or an Index price on Selection Date and this price must be less than \$20,000.	Exchange Price < \$20000 or; Index Price < \$20000
2	Remove all equities that failed liquidity screening.			
3	Minimum Free-Float Shares Screening	Free-Float Shares	<p>Free-float shares are used in calculation of the Index. Bloomberg calculates this figure by subtracting shares held by insiders and those deemed to be stagnant shareholders from the shares outstanding. Stagnant holders include ESOPs, ESOTs, QUESTs, employee benefit trusts, corporations not actively managing money, venture capital companies and shares held by governments.</p> <p>Securities should have free-float market capitalization equal to or greater than 50% of the equity universe minimum size requirement (total market capitalization).</p>	<p>Minimum Float = $EQY_FLOAT * Index\ Price \geq 0.50 * CUR_MKT_CAP$ of the smallest security in the universe as of the selection date</p>
4	Remove all equities that failed Minimum Free-Float Shares Screening.			
5	Minimum Total Market Capitalization Screening	Total Market Capitalization	Use percentile method to find the minimum market capitalization value in the Index eligible universe: cut-off percentile = total market capitalization of the security at the 99th percentile.	<ol style="list-style-type: none"> 1) Sort the Index-eligible universe by total market capitalization from highest to lowest 2) Find the 99th percentile rank. Rank is the position of a security in the universe: Rank = $0.99 * (\text{Number of securities in the Index-eligible universe} - 1) + 1$ 3) Calculate the integer and fraction part of the rank. E.g., if the rank is 3997.63, the integer part is 3997 and the fraction part is 0.63 4) Find the market cap of the securities in the position rank-integer and rank-integer + 1. In the above example, the market cap of the securities are in the 3997th and 3998th positions. 5) Calculate the 99th percentile market cap value by interpolating between the market cap of the securities in

				<p>the position rank-integer and rank-integer + 1. In our example the 99th percentile market-cap value would be:</p> $\text{Market_cap}_{3997} + 0.63 * (\text{Market_cap}_{3998} - \text{Market_cap}_{3997})$
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SIZE INDICES

The Bloomberg US Aggregate Equity Index (AGGE) is sub-divided based on market capitalization rank and security count.



The following steps are taken to determine Index memberships:

US Large Cap Index (B500)

Step	Action
1	After eligibility and liquidity screening, companies are sorted in descending order of total market capitalization and the cumulative free-float market capitalization is calculated for each company.
2	The core cut-off percentile is determined as the cumulative free-float market capitalization of the last security in the Index (The 500 th security in the case of the Bloomberg US Large Cap Index).
3	Lower threshold for the total market capitalization cut-off is determined as the total market capitalization of the company corresponding to the core cut-off percentile from step 2 + 2%.
4	All eligible securities in the current Index with a total market capitalization equal to or higher than the lower threshold for the total market capitalization from step 3 remain in the Index. Current Index members that do not meet the lower threshold for the total market capitalization are excluded from the current Index. K is the count of securities in the Index excluding the securities that do not meet the lower threshold for the total market capitalization.

5	Securities in the Bloomberg US Equity Index that are not in the current Index and that have a total market capitalization higher than the lower threshold for the total market capitalization threshold are considered as potential additions to the current Index. N-K securities from the potential additions are added to the Index in descending order of total market capitalization. Where N is the size of the Index (500 in the case of the Bloomberg US Large Cap Index), and K is the count of securities in the Index excluding the securities that do not meet the lower threshold for the total market capitalization.
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US 200 Index (B200)

Step	Action
1	After completing the reconstitution of the Bloomberg US Large Cap Index, the top 200 securities ranked by market capitalization will constitute the US 200.

US 1000 Index (B1000)

Step	Action
1	After eligibility and liquidity screening, companies are sorted in descending order of total market capitalization and the cumulative free-float market capitalization is calculated for each company.
2	The core cut-off percentile is determined as the cumulative free-float market capitalization of the last security in the Index (The 1000 th security in the case of the Bloomberg 1000 Index).
3	Lower threshold for the total market capitalization cut-off is determined as the total market capitalization of the company corresponding to the core cut-off percentile from step 2 + 2%.
4	All eligible securities in the current Index with a total market capitalization equal to or higher than the lower threshold for the total market capitalization from step 3 remain in the Index. Current Index members that do not meet the lower threshold for the total market capitalization are excluded from the current Index. K is the count of securities in the Index excluding the securities that do not meet the lower threshold for the total market capitalization.
5	Securities in the Bloomberg US Equity Index that are not in the current Index and that have a total market capitalization higher than the lower threshold for the total market capitalization threshold are considered as potential additions to the current Index. N-K securities from the potential additions are added to the Index in descending order of total market capitalization. Where N is the size of the Index (1000 in the case of the Bloomberg 1000 Index), and K is the count of securities in the Index excluding the securities that do not meet the lower threshold for the total market capitalization.

US 2000 Index (B2000)

Step	Action
1	After completing the reconstitution of the Bloomberg 1000 Index and Bloomberg 3000 Index, all companies in the B3000 ex the B1000 will constitute the B2000.

US 2500 Index (B2500)

Step	Action
1	After completing the reconstitution of the Bloomberg 500 Index and Bloomberg 3000 Index, all companies in the B3000 ex the B500 will constitute the B2500.

US 3000 Index (B3000)

Step	Action
1	After eligibility and liquidity screening, companies are sorted in descending order of total market capitalization and the cumulative free-float market capitalization is calculated for each company.
2	The core cut-off percentile is determined as the cumulative free-float market capitalization of the last security in the Index (The 3000 th security in the case of the Bloomberg 3000 Index).

3	Lower threshold for the total market capitalization cut-off is determined as the total market capitalization of the company corresponding to the core cut-off percentile from step 2 + 0.05%.
4	All eligible securities in the current Index with a total market capitalization equal to or higher than the lower threshold for the total market capitalization from step 3 remain in the Index. Current Index members that do not meet the lower threshold for the total market capitalization are excluded from the current Index. K is the count of securities in the Index after the exclusions.
5	Securities in the Bloomberg US Equity Index that are not in the current Index and that have a total market capitalization higher than the lower threshold for the total market capitalization threshold are considered as potential additions to the current Index. N-K securities from the potential additions are added to the Index in descending order of total market capitalization. Where N is the size of the Index (3000 in the case of the Bloomberg 3000 Index), and K is the count of securities in the Index excluding the securities that do not meet the lower threshold for the total market capitalization.

US Mid Cap Index (BMID)

Step	Action
1	After completing the reconstitution of the Bloomberg US 1000 Index, the securities ranked 201 to 1000 by market capitalization will constitute the US Mid Cap.

US Micro Cap Index (BMIC)

Step	Action
1	With companies in AGGE sorted in descending order of total market capitalization, all companies ranked from 2501 up to the end are included in BMIC.

US 400 Index (B400P)

Step	Action
1	After completing the reconstitution of the Bloomberg US 2500 Index, the securities ranked 501 to 900 by market capitalization will constitute the US 400.

US 600 Index (B600P)

Step	Action
1	After completing the reconstitution of the Bloomberg US 2500 Index, the securities ranked 901 to 1500 by market capitalization will constitute the US 600.

US 900 Index (B900P)

Step	Action
1	After completing the reconstitution of the Bloomberg US 3000 Index, the securities ranked 1 to 900 by market capitalization will constitute the US 900.

US 1500 Index (B1500P)

Step	Action
1	After completing the reconstitution of the Bloomberg US 3000 Index, the securities ranked 1 to 1500 by market capitalization will constitute the US 1500.

Sector Indices

All Index Members are classified into a set of industries and sub-industries based on the Bloomberg Industry Classification System (BICS). Index Member's industry classification is determined as of the Selection Date of each quarterly Index Review. The BICS hierarchy is built around 11 level 1 sectors. Each company is classified down to, at least, level 4 and up to level 7.

US REIT Index (B3REIT)

Companies classified as per BICS with a level 3 sub-industry of REIT are eligible to be part of the Bloomberg REIT Indices. NOTE: The REIT sub-industry group does not include companies classified as Mortgage REIT, which umbrellas Commercial Mortgage REIT and Residential Mortgage REIT.

The US REIT Indices are maintained as per the Bloomberg US Domestic Corporate Actions methodology. IPOs classified as REIT are eligible for fast track additions to the US REIT Indices that include US large caps.

Sub-industry groups eligible for the US REIT Index:

BICS Level	Sub-Industry Group Name
3	REIT
4	Multi Asset Class REIT
4	Health Care REIT
5	Hospital REIT
5	Medical Office REIT
5	Senior Housing REIT
5	Skilled Nursing REIT
4	Hotel REIT
4	Residential REIT
5	Apartment REIT
5	Single Family Housing REIT
5	Manufactured Housing REIT
5	Student Housing REIT
4	Industrial REIT
5	Bulk Warehouse REIT
5	Flex Industrial REIT
5	Temp Control Logistics REIT
4	Office REIT
5	CBD Office REIT
5	Suburban Office REIT
4	Retail REIT
5	Regional Mall REIT
5	Shopping Center REIT
5	Single Tenant REIT
4	Self-storage REIT
4	Timber REIT
4	Data Center REIT
4	Infrastructure REIT
4	Gaming REIT
4	Specialty REIT

Value and Growth Indices

The Bloomberg US Equity Value and Growth Indices are screened from the Bloomberg US Large Cap, US 1000, US 2000, US 2500 and US 3000 Indices and are constructed based on a linear combination of risk factors. The four factors are: 1) Earnings Yield, 2) Valuation, 3) Dividend Yield and 4) Growth. The factors are equal-weighted when forming a composite signal where Growth is considered to be a negative indicator and thus flipped to be a negative. The Indices are market-capitalization-weighted. The current price is used to calculate the price based ratios.

The following table details the factor descriptors (all values are captured at the month's end prior to reconciliation):

Factor	Descriptor
Earnings Yield (E)	Earnings to Price (E/P)
	Cash Flow to Price (CF/P)
	Forward Earnings to Price (EPSFY1/P)
Valuations (V)	Book to Price (B/P)
	Sales to Price (S/P)
Dividend Yield (D)	Dividend to Price (D/P)
Growth (G)	Growth in Sales (SPSG)
	Growth in Net Income (EPSG)
	Long-term Growth (EPSLTG)

Let $E(n)$ be the exposure of stock n to Earnings Yield factor;

$V(n)$ the stock exposure to Valuations factor;

$D(n)$ the stock exposure to Dividend Yield;

$G(n)$ the stock exposure to Growth.

The exposure of stock n to the composite Value factor is:

$$\text{Value}(n) = E(n) + V(n) + D(n) - G(n);$$

$$Z() = \text{Z-score}$$

$$\text{Where: } E(n) = Z(E/P) + Z(CF/P) + Z(EPSFY1/P)$$

$$V(n) = Z(B/P) + Z(S/P)$$

$$D(n) = Z(D/P)$$

$$G(n) = Z(PSG) + Z(EPSG) + Z(EPSLTG)$$

Let $W(n)$ be the weight of stock n in the Base-Index. Next, rank stocks according to $\text{Value}(n)$. The top 30% of stocks get full weight in the Value Index, i.e., proportional to $W(n)$. The bottom 30% of stocks get full weight in the Growth Index. The middle 40% get split between Value and Growth Indices based on linear interpolation.

Value tilt factor calculation:

Top 30% of stocks value tilt would be 1. The bottom 30% of stocks value tilt would be 0. Middle 40% get linearly interpolated tilt from 1 (at 30th percentile) to 0 (at 70th percentile).

Growth tilt factor calculation:

$$\text{Growth tilt} = 1 - \text{Value tilt}$$

The middle 40% get split between Value and Growth Indices based on linear interpolation.

IPOs that are fast-tracked into a US Domestic Index are simultaneously added to the Value and Growth associated Indices. Fast tracked IPOs are added equally to Value and Growth Indices with an assigned 0.5 Tilt factor.

Note that the market valuation of the Value and Growth Indices is the same as the underlying index. Securities with missing descriptors receive the median value descriptor of the underlying. See Appendix: Value and Growth Calculation Details for more information.

Dividend Yield Index

The Bloomberg US Large Cap Dividend Yield Index (B500D) represents the performance of top securities by Dividend Indicated Yield screened from the Bloomberg US Large Cap Index (B500), excluding REITs. At Reconstitution the index holds top 100 names with highest Dividend Indicated Yield. To control for turnover, existing members ranked 101 to 120 by Dividend Indicated Yield are also retained by the Index, potentially increasing the membership count beyond 100. Companies are weighted by Dividend Indicated Annualized Amount. No action is taken for announcement of suspended dividends.

The following table details the steps for membership screening (all values are captured at the month's end prior to reconciliation):

Criteria	Description
Bloomberg US Equity Large Cap Index (B500) ex REITs	Companies must be part of this Index universe excluding REITs.
Dividend Indicated Yield	The most recently announced gross dividend, annualized based on the Dividend Frequency (DV016, DVD_FREQ), then divided by the current market price.
Dividend Indicated Annualized Amount	Dividend Indicated Annualized Amount * Shares Outstanding

$$Index\ Security\ Weight_{i,t} = \frac{Dividend\ Indicated\ Annualized\ Amount_{i,mt}}{\sum_{i=1}^n Dividend\ Indicated\ Annualized\ Amount_{i,mt}}$$

$$Index\ Shares_{i,t} = \frac{\sum(\text{shares before rebalancing} * \text{price})\ of\ the\ Dividend\ Yield\ Index_t * Security\ Weight\ after\ rebalance_{i,t}}{Security\ Price_{i,t}}$$

$$Dividend\ Tilt\ Factor_{i,t} = \frac{Index\ Shares_{i,t}}{Base - Index\ Shares_{i,t}}$$

Where:

Security Price_{i,t} = price from applying the waterfall method on the rebalancing date

Base-Index Shares_{i,t} = Index Shares from Base-Index

Index Security Weight_{i,t} = Security Weight on the reconstitution

Dividend Indicated Annualized Amount_{i,mt} = Dividend Indicated Annualize Amount of the security on the month end prior to the reconstitution

Index Shares_{i,t} = Index Shares Dividend Yield Index

Index Tilt Factors are calculated on the reconstitution, Index Share updates follow the Base-Index schedule for float adjustments.

CORPORATE ACTIONS

The methodologies for treatment of corporate actions are provided at the following links:

- Aggregate, Large Cap, Value, Growth: [US Domestic Corporate Action Methodology Market-Capitalized Indices](#)
- Dividend Yield: [US Domestic Corporate Action Methodology Non-Market-Capitalized Indices](#)

Cut-Off time for Corporate Actions which can be moved over to the following day is 16:35 ET on the business day preceding the ex-date. On Early market close days the cut-off will be 35 minutes following the close of US Exchanges.

Action	Moved to Following Day
Spin-off	No
Exchanges and Conversions (Reclassification of Shares)	No
Rights Offering	No
Special Cash Dividends	No
Stock Split	No
Stock Dividend	No
Name and Ticker Change	No
Mergers & Acquisitions	Yes
Delisting	Yes
Regular Cash Dividends	Yes
Change in Listing	Yes

INDEX CALCULATION

Price Return Index Calculation

The price return (PR) Index Value is calculated on each Calculation Day using the following formula:

$$PR\ Index_t = \frac{\sum_{i=1}^n P_{i,t} \times N_{i,t} \times TF_{i,t} \times CA_{i,t} \times FX_{i,t}}{Divisor_t}$$

Where:

$PR\ Index_t$	The price return Index Value on Calculation Day t
$Divisor_t$	The divisor of the index on Calculation Day t
$P_{i,t}$	The price of Index Member i in local currency on Calculation Day t
$N_{i,t}$	The Index Shares for Index Member i on Calculation Day t
$TF_{i,t}$	The Tilt Factor for Index Member i on Calculation Day t Note: $TF_{i,t}$ is equal to 1 for market capitalization weighted indices
$CA_{i,t}$	The Corporate Action Coefficient for Index Member i on Calculation Day t Note: $CA_{i,t}$ is equal to 1 for market capitalization weighted indices
$FX_{i,t}$	The FX Fixing Rate with respect to Index Member i on Calculation Day t
n	Denotes the total number of Index Members Note: If the index has no Index Members, $n = 0$, then $PR\ Index_t = PR\ Index_{t-1}$

Gross Total Return Index Calculation

The gross total return (TR) Index Value reflects the reinvestment of gross dividends. It is calculated on each Calculation Day using the following formula:

$$TR\ Index_t = TR\ Index_{t-1} \times TR_t$$

$$TR_t = \frac{PR\ Index_t}{PR\ Index_{t-1} - D_t}$$

$$D_t = \frac{\sum_{i=1}^n rd_{i,t} \times N_{i,t} \times TF_{i,t} \times CA_{i,t} \times FX_{i,t-1}}{Divisor_t}$$

Where:

$TR\ Index_t$	The gross total return Index Value on Calculation Day t
$Divisor_t$	The divisor of the index on Calculation Day t
D_t	The gross dividend index points
$rd_{i,t}$	The regular dividend per share of Index Member i in local currency on Calculation Day t
$N_{i,t}$	The Index Shares for Index Member i on Calculation Day t
$TF_{i,t}$	The Tilt Factor for Index Member i on Calculation Day t Note: $TF_{i,t}$ is equal to 1 for market capitalization weighted indices
$CA_{i,t}$	The Corporate Action Coefficient for Index Member i on Calculation Day t

Note: $CA_{i,t}$ is equal to 1 for market capitalization weighted indices

$FX_{i,t-1}$ The FX Fixing Rate with respect to Index Member i on Calculation Day $t - 1$

n Denotes the total number of Index Members

Net Total Return Index Calculation

The net total return (NTR) Index Value reflects the reinvestment of net of tax dividends. It is calculated on each Calculation Day using the following formula:

$$NTR\ Index_t = NTR\ Index_{t-1} \times NTR_t$$

$$NTR_t = \frac{PR\ Index_t}{PR\ Index_{t-1} - ND_t}$$

$$ND_t = \frac{\sum_{i=1}^n nd_{i,t} \times N_{i,t} \times TF_{i,t} \times CA_{i,t} \times FX_{i,t-1}}{Divisor_t}$$

$$nd_{i,t} = rd_{i,t} \times (1 - T_{i,t}) - sd_{i,t} \times T_{i,t}$$

Where:

$NTR\ Index_t$ The net total return Index Value on Calculation Day t

$Divisor_t$ The divisor of the index on Calculation Day t

ND_t The net dividend index points

$N_{i,t}$ The Index Shares for Index Member i on Calculation Day t

$TF_{i,t}$ The Tilt Factor for Index Member i on Calculation Day t

Note: $TF_{i,t}$ is equal to 1 for market capitalization weighted indices

$CA_{i,t}$ The Corporate Action Coefficient for Index Member i on Calculation Day t

Note: $CA_{i,t}$ is equal to 1 for market capitalization weighted indices

$FX_{i,t-1}$ The FX Fixing Rate with respect to Index Member i on Calculation Day $t - 1$

$rd_{i,t}$ The regular dividend per share of Index Member i in local currency on Calculation Day t

$sd_{i,t}$ The special dividend per share of Index Member i in local currency on Calculation Day t

$T_{i,t}$ The withholding tax rate for Index Member i on Calculation Day t with respect to the tax table in Appendix: Index Tax Framework

n Denotes the total number of Index Members

Pricing

The Index securities are priced by applying a waterfall based on availability. Cut-Off time for US Equity Prices is 16:35 ET, the final calculations will be done using the last available price at that time or using the waterfall logic if there is no price for current day. On Early market close days, the cutoff will be 35 minutes following the close of US Exchanges.

Price availability is subject to change due to unexpected market or security events. In the event of missing or delayed security prices, Bloomberg will determine the most appropriate price based on the circumstances and provide a notification to clients with the relevant information. All such determinations are made by the Bloomberg Product, Risk & Operations Committee (PROC) and the Bloomberg Benchmark Oversight Committee (BOC).

Price	Description	Bloomberg Mnemonic / Identifier
1) Official Closing	An exchange-calculated and published closing price. Depending on the methodology used by the exchange, the closing price may differ from the last traded price.	PX_OFFICIAL_CLOSE / "TICKER EQY_PRIM_SECURITY_PRIM_EXCH Equity" Ex: AAPL UW Equity
2) Composite Official Closing	The composite closing price based on the last eligible sale received from market participants prior to the closing.	PX_OFFICIAL_CLOSE / "TICKER EQY_PRIM_SECURITY_COMP_EXCH Equity" Ex: AAPL US Equity
3) Bloomberg Calculated Price	Bloomberg will calculate the end-of-day adjusted price as per the terms of the corporate action and previous business day's Index price.	

Precision

The Index is calculated using the following precision:

Field	Precision
Index Level	10 decimal places
Market Capitalization	unrounded
Index Divisor	6 decimal places (rounded up)
Prices	Exchange prices 4 decimal places for corporate action adjustments
Shares	3 decimal places
Dividends	6 decimal places
Adjustment Factors	6 decimal places

Historic Backfill

The securities in the historical backfill are priced by applying a waterfall based on availability, the result is the "Index Price":

Price	Description	Bloomberg Mnemonic
1) Official Closing	An exchange-calculated and published closing price. Depending on the methodology used by the exchange, the closing price may differ from the last traded price. Available starting January 4, 2016.	PX_OFFICIAL_CLOSE
2) Last	Last trade from the primary exchange.	PX_LAST
3) Composite Official Closing	The composite closing price based on the last eligible sale received from market participants prior to the closing. Available starting November 7, 2014.	PX_OFFICIAL_CLOSE
4) Composite Last	The composite last closing price based on the last eligible sale received from market participants prior to the closing. Not in waterfall starting January 4, 2016.	PX_LAST
5) Bloomberg Calculated Price	Bloomberg will calculate the end-of-day adjusted price as per the terms of the corporate action and previous business day's Index price.	

To account for availability of some price sources the below periodic waterfalls were used in the historic backfill:

Periodic Pricing Waterfall		
Start Date - November 6, 2014	November 7, 2014 - January 3, 2016	January 4, 2016 - Present
1) Last	1) Last	1) Official Closing
2) Composite Last	2) Composite Official Closing	2) Composite Official Closing
3) Bloomberg Calculated Price	3) Composite Last	3) Bloomberg Calculated Price
	4) Bloomberg Calculated Price	

The Index history was generated employing the Index methodology with the exception of the following qualifications:

Dates	Methodology Exception
Start Date - 1/18/2019	The free-float shares used for calculation of the Index are referenced on the selection date and will not change, in the event of adjustments, until after the rebalance date. All Index calculations prior to 1/18/2019 used the potentially adjusted free-float share on settle date as of record on 1/18/2019.
Start Date - 1/1/2014	Most eligibility screens are valid as of Reconstitution only. Intra-quarter validation was not implemented.

INDEX MAINTENANCE

An index must be rebalanced periodically and maintained on a daily basis for corporate actions to accurately reflect the aggregate performance of its members.

1.1. Quarterly Index Review

Index Shares and Industry Classifications are updated on a quarterly basis on the 2nd Wednesday of March, June, September and December, using data as of one day in the last week of January, April, July and October. Changes are announced with 10 full business day advance notification.

Updates in Index Shares are determined using publicly available information such as float shares outstanding and foreign investment limits.

Updates in Industry Classifications are determined using a mix of publicly available quantitative measures such as revenue, operating income and assets and qualitative measures such as market perception.

1.2. Semi-Annual Index Review

Index Membership is reviewed on a semi-annual basis on the 2nd Wednesday of March and September, using data as of one day in the last week of January and July. The changes are announced with 10 full business day advance notification.

The announcement and the implementation of the semi-annual Index Reviews coincide with the quarterly Index Review dates.

Each Rebalance follows the exchange calendar for NYSE trading days. Should a Rebalance fall on a NYSE exchange holiday, it will be postponed to the next business day.

	Semi-Annual Index Review			Quarterly Index Review			Semi-Annual Index Review			Quarterly Index Review		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selection Date	Last Week			Last Week			Last Week			Last Week		
Announcement Date		Last Wed			Last Wed			Last Wed			Last Wed	
Effective Date			2 nd Wed			2 nd Wed			2 nd Wed			2 nd Wed

LIMITATIONS OF THE INDEX

Although each Index is designed to be representative of the market it measures or otherwise align with its stated objective, it may not be representative in every case or achieve its stated objective in all instances. The Index is designed and calculated strictly to follow the rules of this methodology, and any Index level or other output is limited in its usefulness to such design and calculation.

Markets can be volatile, including those market interests that the Index measures or upon which the Index is dependent to achieve its stated objective. For example, illiquidity can have an impact on the quality or amount of data available to the administrator for calculation and may cause the Index to produce unpredictable or unanticipated results.

In addition, market trends and changes to market structure may render the objective of the Index unachievable or to become impractical to replicate by investors.

In particular, the indices measure US equity markets. As with all equity investing, the indices are exposed to market risk. The value of equities fluctuates with the changes in economic forecasts, interest rate policies established by central banks and perceived geopolitical risk. The indices do not take into account the cost of replication and as a result a tracking portfolio's returns will underperform the Index with all else equal. As the indices are designed to measure those markets, they could be materially impacted by market movements, thus significantly impacting the use or usefulness of the fixings for some or all users.

In addition, certain Sub-Indices may be designed to measure smaller subsets of the indices (e.g. such as specific styles, size, and sector). Some of these Sub-Indices have very few qualifying constituents and may have none for a period of time. During such period, the Sub-Index will continue to be published at its last value, effectively reporting a 0% return, until new constituents qualify. If no constituents are expected to qualify (due to changes in market structure and other factors), the Sub-Index may be discontinued. In such an event, this discontinuation will be announced to Index users.

BENCHMARK OVERSIGHT AND GOVERNANCE

Benchmark Governance, Audit and Review Structure

Please refer to the BISL Benchmark Procedures Handbook available [here](#).

INDEX AND DATA REVIEWS

Please refer to the BISL Benchmark Procedures Handbook available [here](#).

EXPERT JUDGMENT

Please refer to the BISL Benchmark Procedures Handbook available [here](#).

CONFLICTS OF INTEREST

Please refer to the BISL Benchmark Procedures Handbook available [here](#).

RESTATEMENT POLICY

Please refer to the BISL Benchmark Procedures Handbook available [here](#).

Appendices

Appendix 1: Value and Growth Calculation Details

Calculation	Details
ZScore	$(\text{value} - \text{mean}) / \text{std}(\text{ddof}=0)$
Growth - Linear interpolation (applies to revenue and EPS)	<p>Steps:</p> <ul style="list-style-type: none"> Define x for months: [0],[12],[24],[36],[48] Define y for corresponding annual values (revenue and EPS). All 5 values must be present. Note: Where all 5 values are 0, they are treated as not present. Perform Linear regression of y on x. Take slope and divide it by average of (absolute values of each y) to calculate unit-less growth <p>1.</p> <p>Reference: https://scikit-learn.org/stable/modules/generated/sklearn.linear_model.LinearRegression.html</p> <p>No defaults overridden</p>
Winsorize and ZScore for Value factor	All descriptors are first filled for blank values with median of the universe, then winsorized before computation of z-score. However, filling and winsorization not needed
Winsorize	<p>Returns a Winsorized version of the input array. The lowest values are set to 0.5 percentile, and the highest values are set to 99.5 percentile.</p> <p>Example 1: for B500, treat 0.5% of the names (use floor of 2, when 0.5% is fractional 2.5) as outlier. So take 3rd highest value and use it to replace 1st and 2nd value. Similarly, So take 498th lowest value and use it to replace last 2 values.</p> <p>Example 2: for B1000, treat 0.5% of the names (=5) as outlier. So, take 6th highest value and use it to replace top five values. Similarly, so take 995th lowest value and use it to replace last 5 values.</p> <p>Reference: https://docs.scipy.org/doc/scipy-0.13.0/reference/generated/scipy.stats.mstats.winsorize.html</p> <p>No defaults overridden.</p>
Forward Earnings to Price	Uses previous day's price which tilt uses today's price

Appendix 2: Bloomberg Industry Classification System (BICS)

Methodology

Bloomberg classifies companies by tracking their primary business activities as measured by their primary source of revenue; it then groups them together according to market based industries. Members of groupings should exhibit similar behaviour in market cycles and should be correlated. Each company is reviewed at least once a year and following significant changes such as an M&A.

Data Driven

Bloomberg's experienced analyst teams utilize the full power of the Bloomberg terminal to classify companies based on various qualitative and quantitative measures. The lead quantitative measure for determining primary business activity is revenue. Secondary quantitative considerations include operating income and assets. Qualitative measures such as market perceptions are also considered if a strong consensus exists within the market or when quantitative measures are insufficient to determine the company's primary classification.

Hierarchy structure and features

Bloomberg classifies every company to Level 4, Sub Industry and, where appropriate, classifies companies at more granular levels such as Segment Levels (Levels 5-7). This allows BICS to capture all levels of specialization within an industry and provides flexibility for users.

Structure (applicable to equities)

- Level 1 – 11 Sectors
- Level 2 – 20 Industry Groups
- Level 3 – 59 Industries
- Level 4 – 214 Sub-Industries
- Level 5 – 693 Segments
- Level 6 – 576 Segments
- Level 7 – 174 Segments

Level 1 Sectors

Communications	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care
Industrials	Materials	Real Estate	Technology	Utilities	

The complete BICS Hierarchy and more information on BICS can be found by searching "BICS" using the DOCS function.

Appendix 3: Index Tax Framework

All withholding rates are researched and supplied by Bloomberg Tax & Accounting (BTAX). Withholding rates are applied to each Index Member based on its country of incorporation.

Bloomberg does not take into account specialized or individualized tax situations of investors or companies when applying withholding tax to the net dividend index calculation. In some instances, special tax exemptions are offered to companies who might generate profit from promoting tourism, or reducing carbon emissions, or structuring capital repayments. In other instances, some investors may benefit from certain tax statuses, treaties, or reinvestment strategies.

Because Bloomberg cannot know the individual circumstances of each company or investor, and many exemptions must be re-applied for each fiscal year, Bloomberg chooses to apply a withholding rate that has the widest general applicability. We recommend consulting with a tax specialist to advise on specific tax treatments.

Withholding rates are as follows. Changes to withholding rates are monitored and supplied by BTAX. Should a rate change, Bloomberg will supply a communication to subscribed clients regarding the change and ensuing implementation date for the updated rate.

Bloomberg Tax Withholding Rates

Country	Country ISO	Country ISO (3)	Rate (%)	REIT Rate (%)
Afghanistan	AF	AFG	20	
Albania	AL	ALB	8	
Algeria	DZ	DZA	15	
American Samoa	AS	ASM	30	
Andorra	AD	AND	0	
Angola	AO	AGO	10	
Anguilla	AI	AIA	0	
Antigua & Barbuda	AG	ATG	25	
Argentina	AR	ARG	7	
Armenia	AM	ARM	10	
Aruba	AW	ABW	10	
Australia	AU	AUS	30	
Austria	AT	AUT	27.5	
Bahamas	BS	BHS	0	
Azerbaijan	AZ	AZE	10	
Bahrain	BH	BHR	0	
Bangladesh	BD	BGD	20	
Barbados	BB	BRB	25	
Belarus	BY	BLR	12	
Belgium	BE	BEL	30	
Belize	BZ	BLZ	15	
Benin	BJ	BEN	15	
Bermuda	BM	BMU	0	
Bhutan	BT	BTN	10	
Bolivia	BO	BOL	12.5	
Bonaire	BQ	BES	15	
Bosnia Herzegovina	BA	BIH	10	
Botswana	BW	BWA	7.5	
Brazil	BR	BRA	0	
British Virgin Islands	VG	VGB	0	

Country	Country ISO	Country ISO (3)	Rate (%)	REIT Rate (%)
Brunei	BN	BRN	0	
Bulgaria	BG	BGR	5	
Burkina Faso	BF	BFA	12.5	
Burundi	BI	BDI	15	
Cabo Verde	CV	CPV	10	
Cambodia	KH	KHM	14	
Cameroon	CM	CMR	16.5	
Canada	CA	CAN	25	
Cayman Islands	KY	CYM	0	
Central African Republic	CF	CAF	15	
Chad	TD	TCD	20	
Chile	CL	CHL	35	
China	CN	CHN	10	
Colombia	CO	COL	10	
Comoros	KM	COM	10	
Cook Islands	CK	COK	15	
Costa Rica	CR	CRI	5	
Côte D'Ivoire	CI	CIV	15	
Croatia	HR	HRV	12	
Curacao	CW	CUW	0	
Cyprus	CY	CYP	0	
Czech Republic	CZ	CZE	35	
Democratic Republic of Congo	CD	COD	20	
Denmark	DK	DNK	27	
Djibouti	DJ	DJI	0	
Dominica	DM	DMA	15	
Dominican Republic	DO	DOM	10	
Ecuador	EC	ECU	0	
Egypt	EG	EGY	10	
El Salvador	SV	SLV	5	
Equatorial Guinea	GQ	GNQ	25	
Eritrea	ER	ERI	0	
Estonia	EE	EST	0	
Eswatini	SZ	SWZ	15	
Ethiopia	ET	ETH	10	
Falkland Islands	FK	FLK	26	
Faroe Islands	FO	FRO	0	
Fiji	FJ	FJI	0	
Finland	FI	FIN	30	
France	FR	FRA	28	
French Polynesia	PF	PYF	10	
Gabon	GA	GAB	20	
Gambia	GM	GMB	15	
Georgia	GE	GEO	5	

Country	Country ISO	Country ISO (3)	Rate (%)	REIT Rate (%)
Germany	DE	DEU	25	
Ghana	GH	GHA	8	
Gibraltar	GI	GIB	0	
Greece	GR	GRC	5	
Greenland	GL	GRL	36	
Grenada	GD	GRD	15	
Guam	GU	GUM	30	
Guatemala	GT	GTM	5	
Guernsey	GG	GGY	0	
Guinea	GN	GIN	15	
Guinea-Bissau	GW	GNB	30	
Guyana	GY	GUY	20	
Haiti	HT	HTI	20	
Honduras	HN	HND	10	
Hong Kong	HK	HKG	0	
Hungary	HU	HUN	0	
Iceland	IS	ISL	20	0
India	IN	IND	20	
Indonesia	ID	IDN	20	
Iraq	IQ	IRQ	0	
Ireland	IE	IRL	25	
Isle of Man	IM	IMN	0	
Israel	IL	ISR	25	
Italy	IT	ITA	26	
Jamaica	JM	JAM	33.33	
Japan	JP	JPN	15.315	
Jersey	JE	JEY	0	
Jordan	JO	JOR	0	
Kazakhstan	KZ	KAZ	15	
Kenya	KE	KEN	15	
Kiribati	KI	KIR	0	
Kosovo	XK		0	
Kuwait	KW	KWT	0	
Kyrgyzstan	KG	KGZ	10	
Lao People's Democratic Republic	LA	LAO	10	
Latvia	LV	LVA	0	
Lebanon	LB	LBN	10	
Lesotho	LS	LSO	0	
Liberia	LR	LBR	15	
Libya	LY	LBY	0	
Lichtenstein	LI	LIE	0	
Lithuania	LT	LTU	15	
Luxembourg	LU	LUX	15	
Macao	MO	MAC	0	

Country	Country ISO	Country ISO (3)	Rate (%)	REIT Rate (%)
Madagascar	MG	MDG	10	
Malawi	MW	MWI	0	
Malaysia	MY	MYS	0	10
Maldives	MV	MDV	10	
Mali	ML	MLI	10	
Malta	MT	MLT	0	
Marshall Islands	MH	MHL	0	
Mauritania	MR	MRT	10	
Mauritius	MU	MUS	0	
Mexico	MX	MEX	10	30
Micronesia	FM	FSM	0	
Moldova	MD	MDA	6	
Monaco	MC	MCO	0	
Mongolia	MN	MNG	20	
Montenegro	ME	MNE	9	
Montserrat	MS	MSR	0	
Morocco	MA	MAR	15	
Mozambique	MZ	MOZ	20	
Myanmar	MM	MMR	0	
Namibia	NA	NAM	20	
Nauru	NR	NRU	0	
Nepal	NP	NPL	0	
Netherlands	NL	NLD	15	
New Caledonia	NC	NCL	18	
New Zealand	NZ	NZL	15	
Nicaragua	NI	NIC	15	
Niger	NE	NER	0	
Nigeria	NG	NGA	10	
Niue	NU	NIU	0	
North Macedonia	MK	MKD	10	
Northern Mariana Islands	MP	MNP	30	
Norway	NO	NOR	25	
Oman	OM	OMN	0	
Pakistan	PK	PAK	15	
Palau	PW	PLW	4	
Palestine	PS	PSE	0	
Panama	PA	PAN	10	
Papua New Guinea	PG	PNG	15	
Paraguay	PY	PRY	15	
Peru	PE	PER	5	
Philippines	PH	PHL	30	
Poland	PL	POL	19	
Portugal	PT	PRT	25	
Puerto Rico	PR	PRI	10	

Country	Country ISO	Country ISO (3)	Rate (%)	REIT Rate (%)
Qatar	QA	QAT	0	
Republic of the Congo	CG	COG	15	
Romania	RO	ROU	5	
Russia	RU	RUS	15	
Rwanda	RW	RWA	20	
Saint Kitts and Nevis	KN	KNA	15	
Saint Lucia	LC	LCA	0	
Saint Martin	MF	MAF	0	
Samoa	WS	WSM	0	
San Marino	SM	SMR	0	
Sao Tome and Principe	ST	STP	20	
Saudi Arabia	SA	SAU	5	
Senegal	SN	SEN	10	
Serbia	RS	SRB	20	
Seychelles	SC	SYC	15	
Sierra Leone	SL	SLE	10	
Singapore	SG	SGP	0	10
Saint Maarten	SX	SXM	0	
Slovakia	SK	SVK	0	
Slovenia	SI	SVN	15	
Solomon Islands	SB	SLB	30	
Somalia	SO	SOM	0	
South Africa	ZA	ZAF	20	
South Korea	KR	KOR	22	
South Sudan	SS	SSD	0	
Spain	ES	ESP	19	
Sri Lanka	LK	LKA	14	
St Vincent and the Grenadines	VC	VCT	0	
Sudan	SD	SDN	0	
Suriname	SR	SUR	25	
Sweden	SE	SWE	30	
Switzerland	CH	CHE	35	
Taiwan	TW	TWN	21	15
Tajikistan	TJ	TJK	0	
Tanzania	TZ	TZA	10	
Thailand	TH	THA	10	
Timor-Leste	TL	TLS	0	
Togo	TG	TGO	0	
Tonga	TO	TON	15	
Trinidad and Tobago	TT	TTO	10	
Tunisia	TN	TUN	10	
Turkey	TR	TUR	15	
Turkmenistan	TM	TKM	0	
Turks and Caicos Islands	TC	TCA	0	

Country	Country ISO	Country ISO (3)	Rate (%)	REIT Rate (%)
Tuvalu	TV	TUV	0	
US Virgin Islands	VI	VIR	11	
Uganda	UG	UGA	15	
Ukraine	UA	UKR	15	
United Arab Emirates	AE	ARE	0	
United Kingdom	GB	GBR	0	20
United States	US	USA	30	
Uruguay	UY	URY	7	
Uzbekistan	UZ	UZB	10	
Vanuatu	VU	VUT	0	
Venezuela	VE	VEN	0	
Vietnam	VN	VNM	0	
Wallis and Futuna	WF	WLF	0	
Yemen	YE	YEM	0	
Zambia	ZM	ZMB	20	
Zimbabwe	ZW	ZWE	15	

Appendix 4: History Construction

As the Indices have garnered increased interest and adoption by market participants, there has been demand in back-calculating the history available beyond the base date of March 26, 2007. The Indices were calculated by applying the time windowed methodology used at the original base date and extending the history start date to March 29, 1993 or earlier based on data availability.

Index Ticker	Start Date
AGGE / AGGET / AGGENT	March 31, 1986
B500 / B500T / B500N	March 31, 1986
B200 / B200T / B200N	March 31, 1986
B400P / B400T / B400N	March 31, 1986
B600P / B600T / B600N	March 31, 1986
B900P / B900T / B900N	March 31, 1986
B1000 / B1000T / B1000N	March 31, 1986
B1500P / B1500T / B1500N	March 31, 1986
B2000 / B2000T / B2000N	March 29, 1993
B2500 / B2500T / B5000N	March 29, 1993
B3000 / B3000T / B3000N	March 29, 1993
BMID / BMIDT / BMIDN	March 31, 1986
BMIC / BMICT / BMICN	March 29, 1993

To ensure continuity with the live history, the index level values were rebased back to the start date. Missing historical data applied the most recent available terminal data. As such, assumptions may not hold and are subject to completeness of data.

Index Shares

The number of Index Shares are derived by multiplying the point in time total shares outstanding by the point in time free floating percentage. Where free float percentage is not available, the following waterfall was applied:

- Earliest known free float percentage
- If there is no historical record of any free float percentage, then assume 100% free float percentage

For depositary receipts, the number of Index Shares are derived by multiplying the point receipt total shares outstanding by the underlying common stock's free float percentage. If no historical record existed, or if the underlying stock was a private security, then assume 100% free float percentage.

Appendix 5: Environmental, Social and Governance Disclosures

EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY	
Item 1. Name of the benchmark administrator.	Bloomberg Index Services Limited ("BISL")
Item 2. Type of benchmark or family of benchmarks.	Equities
Item 3. Name of the benchmark or family of benchmarks.	US Domestic Equity
Item 4. Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	No
<p>Item 5. Where the response to Item 4 is positive, please list below, for each family of benchmarks, those ESG factors that are taken into account in the benchmark methodology, taking into account the ESG factors listed in Annex II to Delegated Regulation (EU) 2020/1816.</p> <p>Please explain how those ESG factors are used for the selection, weighting or exclusion of underlying assets. The ESG factors shall be disclosed at an aggregated weighted average value at the level of the family of benchmarks.</p>	
(a) List of environmental factors considered:	Not applicable
(b) List of social factors considered:	Not applicable
(c) List of governance factors considered:	Not applicable
<p>Item 6. Where the response to Item 4 is positive, please list below, for each benchmark, those ESG factors that are taken into account in the benchmark methodology, taking into account the ESG factors listed in Annex II to Delegated Regulation (EU) 2020/1816, depending on the relevant underlying asset concerned.</p> <p>Please explain how those ESG factors are used for the selection, weighting or exclusion of underlying assets. The ESG factors shall not be disclosed for each constituent of the benchmark, but shall be disclosed at an aggregated weighted average value of the benchmark.</p> <p>Alternatively, all of this information may be provided in the form of a hyperlink to a website of the benchmark administrator included in this explanation. The information on the website shall be easily available and accessible. Benchmark administrators shall ensure that information published on their website remains available for five years.</p>	
(a) List of environmental factors considered:	Not applicable
(b) List of social factors considered:	Not applicable
(c) List of governance factors considered:	Not applicable
Hyperlink to the information on ESG factors for each benchmark:	Not applicable
Item 7. Data and standards used	
(a) Data input. (i) Describe whether the data are reported, modelled or sourced internally or externally. (ii) Where the data are reported, modelled or sourced externally, please name the third party data provider.	Not applicable
(b) Verification and quality of data. Describe how data are verified and how the quality of those data is ensured.	Not applicable
(c) Reference standards Describe the international standards used in the benchmark methodology.	Not applicable
Date on which information has been last updated and reason for the update:	October 2022, Update

Appendix 6: Glossary Of Terms

Term	Definition
Acquirer	A merger or an acquisition (M&A) is when one party (or multiple parties known as the Acquirer) acquires ownership in an existing company (referred to as Target).
Base-Index	The underlying benchmark Index from which another index is derived. The Base-Index is typically a market cap weighted index. For example, the Bloomberg SASB Large Cap Index is based on the Bloomberg US Large Cap Index (B500). The derived index is termed Sub-Index as defined below.
Child	In a Spin-off, the Parent company creates an independent company typically a subsidiary referred to as the Child.
Corporate Action Coefficient (CA)	The calculation of adjusted shares for the Sub-Index post the corporate action event. Adjustment factor applied to a security's closing market price to neutralize an anticipated price movement related to a specific corporate action effective at the open of the next business day.
Fast Track	IPOs that rank among the largest 500 companies and that are eligible as per methodology can be added to an Index outside of an Index Reconstitution.
Index Shares	Shares of an Index Member within an Index. The number of Index Shares are updated at each quarterly Rebalance and adjusted intra-quarter for corporate actions.
Parent	In a Spin-off, the Parent company creates an independent company typically a subsidiary referred to as the Child.
Rebalance	The selection and weighting of securities in an index based upon its methodology. The process of applying a selection and re-weighting of securities to an Index
Rebalance Date	The date upon which a Rebalance is made effective. For the avoidance of doubt the Rebalance becomes effective on the close of the Rebalance Date.
Reconstitution	The process of determining the Index Members for an Index.
Sub-Index	An index that "carved-out" from the Base-Index. Sub-Indices in each segment should add up to the Parent Base-Index. Examples of segments are Size (Large, Mid, Small), Style (Value, Growth) and Sector (Industrial, Technology, Utilities etc.).
Tilt Factor	Tilt Factor (TF) is only applicable to carve out Indices (e.g. Value, Growth). A Tilt Factor "tilts" the weight of the security based on its factor score (e.g., Value Score, Growth Score). Factor applied to a security's float adjusted market capitalization to reflect its exposure to a specific investment objective.

METHODOLOGY CHANGES

Date	Update
Sept 2019	Methodology creation
Nov 2019	Methodology updated for addition of B1000, B2000, B2500, B3000 & BMIC
Jan 2020	Methodology updated for addition of B1000V, B1000G, B2000V, B2000G, B2500V, B2500G, B3000V & B3000G
April 2020	Added language regarding security type eligibility
Nov 2020	Amendment to the Total Return Index calculation formula
Feb 2021	Addition of the Mid Cap and US 200 indices
June 2021	Change in the rebalancing schedule
July 2021	Change in calculation calendar from NYSE to weekday
October 2021	Addition of the US Domestic Sector Indices
	Amendment to the Newly listings and IPO section
November 2021	Clarification to the Fast-Tracked IPO treatment in the Value and Growth Indices
December 2021	Addition of the US REIT section
June 2022	Addition of Net Total Return (NTR) calculation
October 2022	Addition of B400, B600 and B1500
	Addition of ESG Disclosure
August 2023	Addition of History Construction assumptions to the Appendix
December 2023	Addition of B900
	Amendment to the Historic Backfill section and History Construction Appendix

ACCESSING INDEX DATA

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