

S&P Enhanced Value Indices *Methodology*

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Introduction

The S&P Enhanced Value Indices are designed to measure stocks with attractive valuations in the global equity markets on the basis of their value score, which is calculated based on three fundamental measures, book value-to-price, earnings-to-price and sales-to-price (see *Appendix A*).

The S&P Enhanced Value Indices are constructed from the constituents of the S&P Global BMI or other headline universe index (see *Index Construction*).

For more information on the S&P Global BMI or other headline universe indices, please refer to the respective Index Methodology document at www.spdji.com.

This methodology describes the procedures that underlie the construction and maintenance of the S&P Enhanced Value indices. These procedures are monitored by S&P Dow Jones Indices and revised as necessary.

Index Family

The S&P Enhanced Value Indices currently consist of the following:

- S&P Enhanced Value Global LargeMidCap Index
- S&P Enhanced Value Developed LargeMidCap Index
- S&P Enhanced Value Developed Ex-U.S. LargeMidCap Index
- S&P Enhanced Value Developed Ex-Japan LargeMidCap Index
- S&P Enhanced Value Emerging LargeMidCap Index
- S&P Enhanced Value Europe LargeMidCap Index
- S&P Europe 350 Enhanced Value
- S&P Enhanced Value Pan Asia LargeMidCap Index
- S&P Enhanced Value Pan Asia Ex-Japan LargeMidCap Index
- S&P Enhanced Value Japan LargeMidCap Index
- S&P/ASX 200 Enhanced Value
- S&P 500 Enhanced Value
- S&P Enhanced Value United States LargeMidCap Index
- S&P Enhanced Value South Africa Composite Index
- S&P MidCap 400 Enhanced Value
- S&P SmallCap 600 Enhanced Value

In addition, country, region, currency version and size-based indices may also be available. The size-based S&P Enhanced Value Indices follow the size classification of the S&P Global BMI.

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

Eligibility Criteria

Index Eligibility

The S&P Enhanced Value Indices are drawn from the constituents of the S&P Global BMI or other headline universe indices as detailed below.

Index	Universe
S&P Enhanced Value Global LargeMidCap Index	S&P Global LargeMidCap Index
S&P Enhanced Value Developed LargeMidCap Index	S&P Developed LargeMidCap Index
S&P Enhanced Value Developed Ex-U.S. LargeMidCap Index	S&P Developed Ex-U.S. LargeMidCap Index
S&P Enhanced Value Developed Ex-Japan LargeMidCap Index	S&P Developed Ex-Japan LargeMidCap Index
S&P Enhanced Value Emerging LargeMidCap Index	S&P Emerging LargeMidCap Index
S&P Enhanced Value Europe LargeMidCap Index	S&P Europe LargeMidCap Index
S&P Europe 350 Enhanced Value	S&P Europe 350
S&P Enhanced Value Pan Asia LargeMidCap Index	S&P Pan Asia LargeMidCap Index
S&P Enhanced Value Pan Asia Ex-Japan LargeMidCap Index	S&P Pan Asia Ex-Japan LargeMidCap Index
S&P Enhanced Value Japan LargeMidCap Index	S&P Japan LargeMidCap Index
S&P/ASX 200 Enhanced Value	S&P/ASX 200
S&P 500 Enhanced Value	S&P 500
S&P Enhanced Value United States LargeMidCap Index	S&P U.S. LargeMidCap Index
S&P Enhanced Value South Africa Composite Index	S&P South Africa Composite Index
S&P MidCap 400 Enhanced Value	S&P MidCap 400
S&P SmallCap 600 Enhanced Value	S&P SmallCap 600

For a security to be eligible for consideration for the S&P Enhanced Value Indices, it must, on the rebalancing reference date:

- Be an existing member of the relevant index universe;
- Meet additional liquidity criteria set out in the following table (if any).

Index	Additional Liquidity Criteria (Three-Month Average Daily Value Traded)
S&P Enhanced Value Global LargeMidCap Index	US\$ 3 million
S&P Enhanced Value Developed LargeMidCap Index	
S&P Enhanced Value Developed Ex-U.S. LargeMidCap Index	
S&P Enhanced Value Developed Ex-Japan LargeMidCap Index	
S&P Enhanced Value Emerging LargeMidCap Index	US\$ 1 million
S&P Enhanced Value Europe LargeMidCap Index	US\$ 3 million
S&P Europe 350 Enhanced Value	--
S&P Enhanced Value Pan Asia LargeMidCap Index	US\$ 3 million
S&P Enhanced Value Pan Asia Ex-Japan LargeMidCap Index	
S&P Enhanced Value Japan LargeMidCap Index	
S&P/ASX 200 Enhanced Value	--
S&P 500 Enhanced Value	--
S&P Enhanced Value United States LargeMidCap Index	US\$ 3 million
S&P Enhanced Value South Africa Composite Index	ZAR 5 million
S&P MidCap 400 Enhanced Value	--
S&P SmallCap 600 Enhanced Value	--

Index Construction

Constituent Selection

Depending on the index universe in question, a different number of constituents are selected for inclusion in the index.

Index	Number of Constituents in the Enhanced Value Index
S&P Enhanced Value Global LargeMidCap Index	Top quintile of eligible securities by value score
S&P Enhanced Value Developed LargeMidCap Index	
S&P Enhanced Value Developed Ex-U.S. LargeMidCap Index	
S&P Enhanced Value Developed Ex-Japan LargeMidCap Index	
S&P Enhanced Value Emerging LargeMidCap Index	
S&P Enhanced Value Europe LargeMidCap Index	
S&P Europe 350 Enhanced Value	Top 50 securities by value score
S&P Enhanced Value Pan Asia LargeMidCap Index	Top quintile of eligible securities by value score
S&P Enhanced Value Pan Asia Ex-Japan LargeMidCap Index	
S&P Enhanced Value Japan LargeMidCap Index	
S&P/ASX 200 Enhanced Value	Top 40 securities by value score
S&P 500 Enhanced Value	Top 100 securities by value score
S&P Enhanced Value United States LargeMidCap Index	Top quintile of eligible securities by value score
S&P Enhanced Value South Africa Composite Index	
S&P MidCap 400 Enhanced Value	Top 80 securities by value score
S&P SmallCap 600 Enhanced Value	Top 120 securities by value score

Please refer to Appendix B for value score calculation details.

Buffer Rule

A 20% buffer is applied to stocks already in the index in order to reduce portfolio turnover and is implemented as follows:

- **S&P Enhanced Value Indices with a Target Stock Count:**
 1. Stocks are ranked based on value score and those ranked within the top 80% of the target stock count are automatically chosen for index inclusion.
 2. All stocks which are current constituents that fall within the top 120% of the target stock count are then chosen for index inclusion in order of their value score.
 3. If at this point the target stock count has still not been met, the remaining stocks are chosen based on their value score.
- **All Other S&P Enhanced Value Indices:**
 1. Stocks are ranked based on value score and those ranked within the top 16% of the stock count are automatically chosen for index inclusion.
 2. All stocks which are current constituents that fall within the top 24% of the stock count are then chosen for index inclusion in order of their value score.
 3. If at this point 20% of stocks in the index universe have not been chosen, the remaining stocks are chosen based on their value score.

S&P Dow Jones Indices believes turnover in index membership should be avoided when possible. At times a company may appear to temporarily violate one or more of the addition criteria. However, the addition criteria are for addition to an index, not for continued membership. As a result, an index constituent that appears to violate criteria for addition to that index may not be deleted unless ongoing conditions warrant an index change.

Weights Computation

For a given rebalancing date, all the securities eligible for inclusion in the S&P Enhanced Value Indices are weighted by the product of their market capitalization in the eligible index universe and the value score, subject to security, sector and country constraints. This is done using an optimization procedure such that the maximum weight of each security is the lower of 5% and 20 times its market capitalization weight in the eligible index universe, the maximum weight of any given Global Industry Classification Standard (GICS[®]) sector is 40% and the maximum weight of any given country in regional indices that include multiple countries is 40%. Each stock's weight is floored at 0.05%. Note that the capping algorithm redistributes the excess weight to the other stocks in proportion to their value weights, such that the tracking error is minimized.

Where the optimization procedure fails for a given period, the constraints are then relaxed in the following order: the maximum weight of the security, then the maximum weight of the sector and finally, the maximum weight of the country.

For the S&P Enhanced Value South Africa Composite Index, the maximum weight of each security is set at 10%. There is no separate capping rule based on each stock's market capitalization weight. The rest of the procedure follows the same as described above.

Multiple Share Classes

Some companies may have more than one share class line in the respective headline universe index.

- **S&P Enhanced Value South Africa Composite Index.** Each company is represented once by the most liquid share line that is listed on the Johannesburg Stock Exchange.
- **All Other S&P Enhanced Value Indices.** Each company is represented once by the most liquid share line, which is generally the company's primary listing.

Dually Listed Companies

Some companies may have more than one listing in the respective headline universe index. In the S&P Enhanced Value Indices, each company is represented once by the most liquid listing.

Index Maintenance

Index Calculations

The indices are calculated using the divisor methodology used in all S&P Dow Jones Indices' equity indices and are calculated on all days except weekends. Index calculations include price, total and net return series.

The indices are calculated using S&P Dow Jones Indices' modified market cap weighted methodology. A modified market cap weighted index is one where index constituents have a user-defined index weight. Each stock's weight is based on its value score which can be capped as defined in *Index Construction*. Between semi-annual rebalancings, corporate actions generally have no effect on index weights. As stock prices move, the weights shift and the modified weights change.

Please refer to S&P Dow Jones Indices' Index Mathematics Methodology for further details on the modified market cap methodology.

Each company's most liquid share line is used to calculate index levels. Some index constituents use ADRs, GDRs or foreign ordinary shares if the common stock in their local market is illiquid. Pricing for these issues is based on the ADR, GDR or foreign ordinary share in the listing market's currency. In cases of multiple share classes, only the most liquid share lines are used. All Chinese A-shares are excluded from the S&P Enhanced Value Global, Emerging, Pan Asia and Pan Asia Ex-Japan LargeMidCap Indices. However, any non-domestic listed Chinese shares included in the Global, Emerging, Pan Asia and Pan Asia Ex-Japan LargeMidCap Indices are eligible for inclusion in the S&P Enhanced Value Global, Emerging, Pan Asia and Pan Asia Ex-Japan LargeMidCap Indices. Any changes to pricing sources are announced with as much notice as is reasonably possible.

Gross dividends are tabulated daily and included in the total return calculations on their ex-dates. When local market dividend announcement practices make ex-dates unavailable, dividend inclusion follows the local market practice.

Returns-of-capital are treated as capital distribution and the index divisor is adjusted on the event ex-date. For spin-offs that include a cash distribution, the cash distribution is treated as a return-of-capital on the ex-date.

Rebalancing

The S&P Enhanced Value Indices are rebalanced semi-annually after the close on the third Friday of June and December. The fundamental data reference date is five weeks prior to the rebalancing date. As part of the rebalancing process, constituent stock weights are updated. The rebalancing reference dates are the last business day of May and November, respectively. Weights calculated as a result of the reference date data are implemented in the indices using closing prices as of the Wednesday prior to the second Friday of June and December.

Additions and Deletions

The majority of additions and deletions occur as part of the semi-annual index rebalancing in June and December. Constituents removed from an underlying universe index are also removed from the respective S&P Enhanced Value Index simultaneously.

Since some of these indices do not have a fixed number of constituents, additions to and deletions from the index may not be the same number.

Spin-Offs. Spin-offs are ineligible for inclusion in the indices. When the price of the spin-off is not known, the spun-off company is added to the index at a zero price. Once it trades, it is dropped from the index.

For further information, please refer to the *Treatment of Spin-offs in S&P Dow Jones Indices' Equity Indices Policies & Practices* document located on our Web site, www.spdji.com.

Initial Public Offerings (IPOs). IPO additions to the index take place at the semi-annual rebalancings. To be considered eligible for index inclusion, an IPO must first be a constituent of the respective index universe.

Corporate Actions

For more information, please refer to *S&P Dow Jones Indices' Equity Indices Policies & Practices* document located on our Web site, www.spdji.com.

Currency of Calculation

The indices are calculated in U.S. dollars. In addition, the S&P Enhanced Value Europe LargeMidCap Index and S&P Europe 350 Enhanced Value are also available in euros, while the S&P Enhanced Value Japan LargeMidCap Index, S&P/ASX 200 Enhanced Value and S&P Enhanced Value South Africa Composite Index are also available in Japanese yen, Australian dollar and South African rand, respectively.

Exchange Rate

WM/Reuters foreign exchange rates are taken daily at 04:00 PM London time and used in the calculation of the indices. These mid-market fixings are calculated by the WM Company based on Reuters' data and appear on Reuters pages WMRA.

Other Adjustments

In cases where there is no achievable market price for a stock being deleted, it can be removed at a zero or minimal price at the Index Committee's discretion, in recognition of the constraints faced by investors in trading bankrupt or suspended stocks.

Base Dates and History Availability

Index history availability, base dates and base values are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P Enhanced Value Global LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Enhanced Value Developed LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Enhanced Value Developed Ex-U.S. LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Enhanced Value Developed Ex-Japan LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Enhanced Value Emerging LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Enhanced Value Europe LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Europe 350 Enhanced Value	04/27/2015	12/21/2001	12/21/2001	100
S&P Enhanced Value Pan Asia LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Enhanced Value Pan Asia Ex-Japan LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Enhanced Value Japan LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P/ASX 200 Enhanced Value	07/31/2017	06/16/2000	06/16/2000	100
S&P 500 Enhanced Value	04/27/2015	12/16/1994	12/16/1994	100
S&P Enhanced Value United States LargeMidCap Index	04/27/2015	12/17/1999	12/17/1999	100
S&P Enhanced Value South Africa Composite Index	04/27/2015	12/19/2003	12/19/2003	100
S&P MidCap 400 Enhanced Value	11/13/2017	12/20/1991	12/20/1991	100
S&P SmallCap 600 Enhanced Value	01/04/2018	12/30/1994	12/30/1994	100

Index Data

Calculation Return Types

S&P Dow Jones Indices calculates multiple return types which vary based on the treatment of regular cash dividends. The classification of regular cash dividends is determined by S&P Dow Jones Indices.

- Price Return (PR) versions are calculated without adjustments for regular cash dividends.
- Gross Total Return (TR) versions reinvest regular cash dividends at the close on the ex-date without consideration for withholding taxes.
- Net Total Return (NTR) versions, if available, reinvest regular cash dividends at the close on the ex-date after the deduction of applicable withholding taxes.

In the event there are no regular cash dividends on the ex-date, the daily performance of all three indices will be identical.

For a complete list of indices available, please refer to the daily index levels file (“.SDL”).

For more information on the classification of regular versus special cash dividends as well as the tax rates used in the calculation of net return, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology located on our Web site, www.spdji.com.

For more information on the calculation of return types, please refer to S&P Dow Jones Indices’ Index Mathematics Methodology located on our Web site, www.spdji.com.

Index Governance

Index Committee

The indices are maintained by an Index Committee. The Index Committee meets regularly. All committee members are full-time professional members of S&P Dow Jones Indices' staff. At each meeting, the Index Committee reviews pending corporate actions that may affect index constituents, statistics comparing the composition of the indices to the market, companies that are being considered as candidates for addition to an index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting companies, treatment of dividends, share counts or other matters.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document located on our Web site, www.spdji.com.

Index Policy

Announcements

All index constituents are evaluated daily for data needed to calculate index levels and returns. All events affecting the daily index calculation are typically announced in advance via the Index Corporate Events report (.SDE), delivered daily via ftp to all clients. Any unusual treatment of a corporate action or short notice of an event may be communicated via email to clients.

Index methodology is constantly under review for best practices, and any changes are announced well ahead of time via the Web site and email to all clients.

For more information, please refer to the Announcements section of S&P Dow Jones Indices' Equity Indices Policies & Practices document located on our Web site, www.spdji.com.

Pro-forma Files

In addition to the corporate events file (.SDE), S&P Dow Jones Indices provides constituent pro-forma files each time the indices rebalance. The pro-forma file is typically provided daily in advance of the rebalancing date and contains all constituents and their corresponding weights and index shares effective for the upcoming rebalancing. Since index shares are assigned based on prices prior to the rebalancing, the actual weight of each stock at the rebalancing differs from these weights due to market movements.

Please visit www.spdji.com for a complete schedule of rebalancing timelines and pro-forma delivery times.

Holiday Schedule

The S&P Enhanced Value Indices are calculated on all business days of the year with the exception of the following indices, which are calculated only on days when at least one of the underlying exchanges of the respective index is open.

- S&P Europe 350 Enhanced Value
- S&P 500 Enhanced Value
- S&P Enhanced Value South Africa Composite Index
- S&P MidCap 400 Enhanced Value
- S&P SmallCap 600 Enhanced Value

A complete holiday schedule for the year is available at www.spdji.com.

Rebalancing

The index committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document located on our Web site, www.spdji.com.

Recalculation Policy

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document located on our Web site, www.spdji.com.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document located on our Web site, www.spdji.com.

Contact Information

For questions regarding an index, please contact: index_services@spglobal.com.

Index Dissemination

Index levels are available through S&P Dow Jones Indices' Web site at www.spdji.com, major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

Tickers

The table below contains tickers for the headline indices.

Index	Return Type	Bloomberg	Reuters
S&P Enhanced Value Global LargeMidCap Index (USD)	Price Return	SEVGXUP	--
	Total Return	SEVGXUT	--
	Net Total Return	SEVGXUN	--
S&P Enhanced Value Developed LargeMidCap Index (USD)	Price Return	SEVDXUP	--
	Total Return	SEVDXUT	--
	Net Total Return	SEVDXUN	--
S&P Enhanced Value Developed Ex-U.S. LargeMidCap Index (USD)	Price Return	SEVDYXUP	--
	Total Return	SEVDYXUT	--
	Net Total Return	SEVDYXUN	--
S&P Enhanced Value Developed Ex-Japan LargeMidCap Index (USD)	Price Return	SEVDJXUP	--
	Total Return	SEVDJXUT	--
	Net Total Return	SEVDJXUN	--
S&P Enhanced Value Emerging LargeMidCap Index (USD)	Price Return	SEVEMXUP	--
	Total Return	SEVEMXUT	--
	Net Total Return	SEVEMXUN	--
S&P Enhanced Value Europe LargeMidCap Index (USD)	Price Return	SEVEUXUP	--
	Total Return	SEVEUXUT	--
	Net Total Return	SEVEUXUN	--
S&P Enhanced Value Europe LargeMidCap Index (EUR)	Price Return	SEVEUXEP	--
	Total Return	SEVEUXET	--
	Net Total Return	SEVEUXEN	--
S&P Europe 350 Enhanced Value (USD)	Price Return	SEUEVUP	--
	Total Return	SEUEVUT	--
	Net Total Return	SEUEVUN	--
S&P Europe 350 Enhanced Value (EUR)	Price Return	SEUEVEP	--
	Total Return	SEUEVET	--
	Net Total Return	SEUEVEN	--
S&P Enhanced Value Pan Asia LargeMidCap Index (USD)	Price Return	SEVPAXUP	--
	Total Return	SEVPAXUT	--
	Net Total Return	SEVPAXUN	--
S&P Enhanced Value Pan Asia Ex-Japan LargeMidCap Index (USD)	Price Return	SEVPJXUP	--
	Total Return	SEVPJXUT	--
	Net Total Return	SEVPJXUN	--
S&P Enhanced Value Japan LargeMidCap Index (USD)	Price Return	SEVJXUP	--
	Total Return	SEVJXUT	--
	Net Total Return	SEVJXUN	--
S&P Enhanced Value Japan LargeMidCap Index (JPY)	Price Return	SEVJXJP	--
	Total Return	SEVJXJT	--
	Net Total Return	SEVJXJN	--

Index	Return Type	Bloomberg	Reuters
S&P/ASX 200 Enhanced Value (USD)	Price Return	SPEVAXUP	--
	Total Return	SPEVAXUT	--
	Net Total Return	SPEVAXUN	--
S&P/ASX 200 Enhanced Value (AUD)	Price Return	SPEVAXAP	--
	Total Return	SPEVAXAT	--
	Net Total Return	SPEVAXAN	--
S&P 500 Enhanced Value (USD)	Price Return	SEV5UP	--
	Total Return	SEV5UT	--
	Net Total Return	SEV5UN	--
S&P Enhanced Value United States LargeMidCap Index (USD)	Price Return	SEVUSXUP	--
	Total Return	SEVUSXUT	--
	Net Total Return	SEVUSXUN	--
S&P Enhanced Value South Africa Composite Index (USD)	Price Return	SEVSACUP	--
	Total Return	SEVSACUT	--
	Net Total Return	SEVSACUN	--
S&P Enhanced Value South Africa Composite Index (ZAR)	Price Return	SEVSACZP	--
	Total Return	SEVSACZT	--
	Net Total Return	SEVSACZN	--
S&P MidCap 400 Enhanced Value (USD)	Price Return	SPMEVUP	--
	Total Return	SPMEVUT	--
	Net Total Return	--	--
S&P SmallCap 600 Enhanced Value	Price Return	SP6EVUP	.SP6EVUP
	Total Return	SP6EVUT	.SP6EVUT
	Net Total Return	--	--

FTP

Daily stock level and index data are available via FTP subscription.

For product information, please contact S&P Dow Jones Indices, www.spdji.com/contact-us.

Web site

For further information, please refer to S&P Dow Jones Indices' Web site at www.spdji.com.

Appendix A

Fundamental Ratios Calculation

The first step to determine the overall value score is to calculate, as of the rebalancing reference date, the three fundamental ratios below for each security in the index universe. They are defined as follows:

- **Book Value-to-Price Ratio.** This is calculated as a company's latest book value per share divided by its price:

$$\text{Book Value-to-Price} = \frac{BVPS}{P}$$

- **Earnings-to-Price Ratio.** This is calculated as a company's trailing 12-month earnings per share divided by its price:

$$\text{Earnings-to-Price} = \frac{EPS}{P}$$

- **Sales-to-Price Ratio.** This is calculated as a company's trailing 12-month sales per share divided by its price:

$$\text{Sales-to-Price} = \frac{SPS}{P}$$

Outlier Handling and Winsorization. Outlier fundamental ratios are winsorized to ensure that the average values used to calculate the overall value score are less distorted by extreme values. For a given fundamental variable, the values for all securities are first ranked in ascending order. Then, for securities that lie above the 97.5 percentile rank or below the 2.5 percentile rank, their value is set as equal to the value of the 97.5 percentile ranked or the 2.5 percentile ranked security, whichever is applicable.

Appendix B

Z-score & Value Score Computation

Z-score Computation. Computing a z-score is a widely adopted method of standardizing a variable in order to combine it with other variables that may have a different scale or unit of measurement. After winsorizing all the three fundamental ratios, the z-score for each of the three ratios for each security is calculated using the mean and standard deviation of the relevant variable within each of the index universes.

The z-score is calculated as follows:

$$z_{\alpha} = \frac{(x_{\alpha} - \mu_{\alpha})}{\sigma_{\alpha}}$$

where:

z_{α} = Z-score for a given security

x_{α} = Winsorized variable for a given security

μ_{α} = Arithmetic mean of the winsorized variable in a given index universe, excluding any missing values

σ_{α} = Standard deviation of the winsorized variable in a given index universe

Average Z-score Computation. For each security, the average z-score is computed by taking a simple average of the three scores. Where there is a missing value, the average z-score is computed by taking a simple average of the remaining two scores. A security must have at least one z-score for it to be included in the index.

Outlier Handling and Winsorization. Outlier average z-scores are winsorized to ensure that the average values used to calculate the overall value score are less distorted by extreme values. To do this, for a given average z-score, the values for all securities are first ranked in ascending order. Then, for securities that lie above 4 or below -4, their value is set as equal to 4 or -4, whichever is applicable.

Value Score Computation. Using the winsorized average z-scores for the three value factors, a value score is computed for each of the securities. For a given security, if its winsorized average z-score is above 0, then its value score will be the addition of 1 and the average z-score. On the other hand, if its winsorized average score is below 0, then its value score will be the result of the reciprocal of 1 subtracted by its average z-score.

If average $Z > 0$, Value Score = $1 + Z$

If average $Z < 0$, Value Score = $(1 / (1 - Z))$

If average $Z = 0$, Value Score = 1

Appendix C

Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Change	Effective Date (After Close)	Previous	Methodology Updated
Index Construction: Dually Listed Companies	05/01/2016	--	Some companies may have more than one listing in the respective headline universe index. In the S&P Enhanced Value Indices, each company is represented once by the most liquid listing.
Corporate Actions: Spin-offs	09/30/2015	Spin-offs are ineligible for inclusion in the indices. Any price adjustments that occur due to a spin-off are market cap neutral events for the parent stock.	Spin-offs are ineligible for inclusion in the indices. When the price of the spin-off is not known, the spun-off company is added to the index at a zero price. Once it trades, it is dropped from the index. <i>For further information, please refer to the Treatment of Spin-offs in S&P Dow Jones Indices' Equity Indices Policies & Practices document located on our Web site, www.spdji.com.</i>

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