

S&P/BYMA Indices *Methodology*

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Table of Contents

Introduction	3
Index Objectives, Family, and Highlights	3
Collaboration	4
Supporting Documents	4
Eligibility Criteria and Index Construction	5
S&P Merval Index	5
S&P/BYMA Argentina General Index	6
S&P/BYMA Argentina General Sector Indices	7
S&P/BYMA Domestic-Focus Sector Indices	8
S&P/BYMA CEDEAR Index	9
S&P/BYMA Ingenius Index	10
Index Maintenance	12
Index Calculations	12
Corporate Actions	12
Additions	12
Deletions	12
Stock Suspensions	12
Liquidity Data	13
Other Adjustments	13
Currency of Calculation and Additional Index Return Series	13
Base Dates and History Availability	13
Index Data	15
Calculation Return Types	15
Index Governance	16
Index Committee	16
Index Policy	17
Announcements	17
Pro-forma Files	17
Holiday Schedule	17
Rebalancing	17
Index Closing Times	17
Unexpected Exchange Closures	17

	Recalculation Policy	17
	Real-Time Calculation	18
	Contact Information	18
Index Dissemination		19
	Tickers	19
	Index Data	19
	Web site	19
Appendix I		20
	Methodology Changes	20
Appendix II		25
	ESG Disclosures	25
Appendix III		26
	Momentum Value Calculation	26
	Z-Score & Momentum Score Computation	26
Disclaimer		28
	Performance Disclosure/Back-Tested Data	28
	Intellectual Property Notices/Disclaimer	29

Introduction

Index Objectives, Family, and Highlights

The S&P Merval and S&P/BYMA Indices measure the performance of various market segments for stocks listed on the Bolsas y Mercados Argentinos (BYMA).

S&P Merval Index. The index is designed to serve as a broad benchmark for the Argentine equities market. The index measures the performance of stocks listed on BYMA classified as domestic stocks that meet certain size and liquidity criteria. Index constituents are weighted by float-adjusted market capitalization, subject to a 15% individual stock weight cap for diversification purposes.

S&P/BYMA Argentina General Index. The index is a float-adjusted market capitalization weighted index that measures the performance of all stocks listed on BYMA classified as domestic stocks that traded for at least 20% of the trading days in the previous 12 months.

S&P/BYMA Argentina General Sector Indices. The indices measure the performance of stocks in the S&P/BYMA Argentina General Index classified in the 11 Global Industry Classification Standard (GICS)[®] Sectors.

S&P/BYMA Domestic-Focus Sector Indices. The indices combine GICS classifications to represent various segments of the domestic Argentinean market.

- **S&P/BYMA Argentina General Construction Index.** The index measures the float-adjusted market capitalization weighted performance of constituents of the S&P/BYMA Argentina General Index classified as part of certain GICS sub-industries as detailed in *Eligibility Criteria and Index Construction*.
- **S&P/BYMA Argentina General Energy and Utilities Index.** The index measures the float-adjusted market capitalization weighted performance of constituents of the S&P/BYMA Argentina General Index classified as part of certain GICS sectors as detailed in *Eligibility Criteria and Index Construction*.

S&P/BYMA CEDEAR Index. The index measures the performance of liquid Argentinian Depositary Receipts (CEDEARs). Index constituents are six-month Median Daily Value Traded (MDVT) weighted, subject to a 15% single constituent weight cap. Stocks in the index are represented by the respective CEDEAR.

For information on CEDEARs, please refer [here](#).

S&P/BYMA Ingenius Index. The index measures the performance of BYMA-listed CEDEARs trading on the NYSE or Nasdaq related to the constituents of the S&P Global BMI classified as part of certain GICS Sub-industries that have high S&P Growth Scores. Index constituents are S&P Momentum Score weighted, subject to a 20% single constituent weight cap. Stocks in the index are represented by the respective CEDEAR.

For more information on GICS, please refer to *S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology*.

Collaboration

Pursuant to an Index Operation and License Agreement dated March 2018 (the "Agreement") between S&P Dow Jones Indices LLC ("S&P DJI") and Bolsas y Mercados Argentinos ("BYMA"), as amended, S&P DJI and BYMA have agreed to jointly publish and co-brand a family of indices (the "Indices"). The Indices were co-branded with the "S&P MERVAL" and "S&P/BYMA" naming convention on December 3, 2018 in conjunction with S&P Dow Jones Indices' assumption of index calculation and maintenance. Prior to January 14, 2019, the Indices were calculated and maintained by BYMA.

Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology	Equity Indices Policies & Practices
S&P Dow Jones Indices' Index Mathematics Methodology	Index Mathematics Methodology
S&P Dow Jones Indices' Float Adjustment Methodology	Float Adjustment Methodology
S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology	GICS Methodology

This methodology was created by S&P Dow Jones Indices in agreement with BYMA 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 and BYMA so that the index continues to achieve its objective.

BYMA is a trademark of Bolsas y Mercados Argentinos S.A. and has been licensed for use by S&P Dow Jones Indices.

Eligibility Criteria and Index Construction

S&P Merval Index

Index Universe. The Index Universe consists of all stocks in the S&P/BYMA Argentina General Index, adjusted for any composition changes due to the current rebalancing.

Selection Universe. All stocks in the Index Universe that satisfy the following criteria as of the rebalancing reference date are selected and form the Selection Universe:

- **Investable Weight Factor (Float Factor).** Stocks must have an IWF of at least 5%. IWFs are determined using public information and calculated according to S&P DJI's Float Adjustment Methodology.
- **Trading History.** Stocks must have traded in at least 95% of the trading sessions over the prior six months.
- **Market Capitalization.** The stocks in the index universe are ranked in descending order based on float-adjusted market capitalization (FMC). Current constituents must be within the top 97%, and non-constituents within the top 95%, of the cumulative FMC of the index universe.
- **Liquidity.** The stocks in the index universe are ranked in descending order based on six-month median daily value traded (MDVT). Current constituents must be within the top 97%, and non-constituents within the top 95%, of the cumulative six-month MDVT of the index universe.
- **Multiple Share Classes.** Each company is represented once by the Designated Listing. For more information regarding the treatment of multiple share classes, please refer to Approach B within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Constituent Selection. At each rebalancing, all companies that meet the eligibility criteria are selected, with a minimum target count of 20 stocks. If for a given rebalancing there are fewer than 20 stocks that meet the eligibility criteria, then the stocks in the Selection Universe not complying with the liquidity requirement are ranked in descending order, based on six-month MDVT, and the next most liquid stock will be selected until the minimum count of 20 stocks is reached.

Constituent Weightings. The index is FMC weighted, subject to a 15% individual stock weight cap for diversification purposes.

Rebalancing. The index is rebalanced semi-annually after the close on the third Friday of March and September. As part of the rebalancing process, the index composition and constituent stock weights are updated. The rebalancing reference date is the third Friday of February and August, respectively.

In addition, index shares and weights are updated quarterly, effective after the close on the third Friday of June and December. Index shares are calculated using closing prices on the Wednesday prior to the second Friday of the rebalancing month as the reference price. Index shares are calculated and assigned to each stock to arrive at the weights determined on the reference date. Since index shares are assigned based on prices prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

S&P/BYMA Argentina General Index

Index Universe. The Index Universe consists of all domiciled stocks trading on BYMA. Country of domicile is determined in accordance with the domicile policy described in S&P DJI's Equity Indices Policies & Practices Methodology.

Selection Universe. All stocks in the Index Universe that satisfy the following criteria as of the rebalancing reference date are selected and form the Selection Universe.

- **Investable Weight Factor (Float Factor).** Stocks must have an IWF of at least 5%. IWFs are determined using public information and calculated according to S&P DJI's Float Adjustment Methodology.
- **Trading History.** Stocks must have traded in 20% of the trading sessions over the prior 12 months.
- **Liquidity.** Stocks must have a 12-month MDVT greater than ARS 100,000 (ARS 50,000 for current constituents). If a stock has traded for less than 12 months, the available trading history will be annualized.
- **Multiple Share Classes.** Each company is represented once by the Designated Listing. For more information regarding the treatment of multiple share classes, please refer to Approach B within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices document.

Constituent Selection. All stocks in the Selection Universe are selected and form the index.

Constituent Weightings. The index is FMC weighted.

Initial Public Offerings (IPOs). IPO additions to the indices are made quarterly. The criteria for inclusion of an IPO are the same as that used at the rebalancings. In addition, IPOs must have a trading history of at least three months as of the reference date. The reference date for IPO inclusions will be five weeks prior to the effective rebalancing dates, and additions are effective at the open of Monday following the third Friday of March, June, September, and December. The market capitalization and liquidity criteria of IPOs are evaluated as of the reference date. Since an IPO will have traded less than a full year, the trading value data that is available is annualized to determine index eligibility.

Rebalancing. The index is rebalanced annually after the close on the third Friday of March. As part of the rebalancing process, the index composition and constituent stock weights are updated. The rebalancing reference date is the third Friday of February.

In addition, index shares and weights are updated quarterly after the close on the third Friday of June, September, and December. Index shares are calculated using closing prices on the Wednesday prior to the second Friday of the rebalancing month as the reference price. Index shares are calculated and assigned to each stock to arrive at the weights determined on the reference date. Since index shares are assigned based on prices prior to rebalancing, the actual weight of each constituent at the rebalancing differs somewhat from these weights due to market movements.

S&P/BYMA Argentina General Sector Indices

Index Construction. Companies in the S&P/BYMA Argentina General Index are classified based on the GICS. Each index is made up of all stocks in the GICS sector noted in the table below.

Sector Index	GICS Sector
S&P/BYMA Argentina General Energy (Sector) Index	Energy (GICS Code 10)
S&P/BYMA Argentina General Materials (Sector) Index	Materials (GICS Code 15)
S&P/BYMA Argentina General Industrials (Sector) Index	Industrials (GICS Code 20)
S&P/BYMA Argentina General Consumer Discretionary (Sector) Index	Consumer Discretionary (GICS Code 25)
S&P/BYMA Argentina General Consumer Staples (Sector) Index	Consumer Staples (GICS Code 30)
S&P/BYMA Argentina General Health Care (Sector) Index	Healthcare (GICS Code 35)
S&P/BYMA Argentina General Financials (Sector) Index	Financials (GICS Code 40)
S&P/BYMA Argentina General Information Technology (Sector) Index	Information Services (GICS Code 45)
S&P/BYMA Argentina General Communication Services (Sector) Index	Communication Services (GICS Code 50)
S&P/BYMA Argentina General Utilities (Sector) Index	Utilities (GICS Code 55)
S&P/BYMA Argentina General Real Estate (Sector) Index	Real Estate (GICS Code 60)

Constituent Weightings. The indices are FMC weighted.

Please refer to S&P Dow Jones Indices' Index Mathematics Methodology for a detailed description of a market capitalization weighted index methodology.

GICS Reclassification. A sector index constituent may move from one sector index to another when a GICS reclassification is made. The reclassified company is deleted from the relevant sector index and added to the other at the time this reclassification occurs.

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Index Maintenance. All index adjustments and corporate action treatments, including rebalancings, follow the S&P/BYMA Argentina General Index. At all times the constituents of the indices mirror the constituents of the eligible GICS sub-industries of the underlying index.

S&P/BYMA Domestic-Focus Sector Indices

Index Construction. Companies in the S&P/BYMA Argentina General Index are classified based on GICS. Stocks are grouped within different combinations of GICS sectors and/or sub-industries to form the indices described in the tables below:

S&P/BYMA Argentina General Construction Index	
GICS Code	Sub-Industry
15102010	Construction Materials
15105010	Forest Products
20102010	Building Products
20103010	Construction & Engineering
25201030	Homebuilding

S&P/BYMA Argentina General Energy and Utilities Index	
GICS Code	Sector
10	Energy
55	Utilities

Constituent Weightings. The indices are FMC weighted.

For information on the index calculation methodology, please refer to the Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

GICS Reclassification. A sector index constituent may move from one sector index to another when a GICS reclassification is made. The reclassified company is deleted from the relevant sector index and added to the other at the time this reclassification occurs.

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Index Maintenance. All index adjustments and corporate action treatments, including rebalancings, follow the S&P/BYMA Argentina General Index. At all times the constituents of the indices mirror the constituents of the eligible GICS sub-industries of the underlying index.

S&P/BYMA CEDEAR Index

Index Universe. The index universe consists of all BYMA-listed CEDEARs.

For information on CEDEARs, please refer [here](#).

Selection Universe. All stocks in the index universe that satisfy the following criteria as of the rebalancing reference date are selected and form the Selection Universe:

- **Liquidity.** CEDEARs must have a six-month MDVT of at least ARS 1 million (ARS 0.8 million for current constituents).
- **Multiple Share Classes.** Each company is represented once by the most liquid share class line based on six-month median daily value traded (“MDVT”).

Constituent Selection. At each rebalancing, the index seeks to select the number of eligible CEDEARs that get as close as possible to 90% MDVT of the selection universe. The selection process is as follows:

1. Calculate the selection universe’s cumulative MDVT.
2. Rank the selection universe in descending order by MDVT.
3. Select CEDEARs, in descending order, until the cumulative MDVT of the selected CEDEARs is as close as possible to the target 90% MDVT, without exceeding 90%. The selection process ends with the last CEDEAR whose addition does not exceed that threshold.

Constituent Weightings. At each rebalancing, constituents are six-month MDVT weighted, subject to a single constituent weight cap of 15%.

Rebalancing. Index composition is rebalanced quarterly, effective after the market close on the third Friday of March, June, September, and December. The rebalancing reference date is the last business day of February, May, August, and November, respectively. Constituents’ index shares are calculated using closing prices on the Wednesday prior to the second Friday of the rebalancing month as the reference price. Index share amounts are calculated and assigned to each stock to arrive at the weights determined on the reference date.

S&P/BYMA Ingenius Index

Index Universe. The index universe consists of all BYMA-listed CEDEARs trading on the NYSE or Nasdaq that are related to constituents of the S&P Global BMI, adjusted for any composition changes due the last rebalancing of the underlying index.

For more information on the S&P Global BMI, please refer to the S&P Global BMI, S&P/IFCI Methodology, available at www.spglobal.com/spdji.

For information on CEDEARs, please refer [here](#).

For information on the S&P Global BMI, please refer to the S&P Global BMI, S&P/IFCI Methodology, available at www.spglobal.com/spdji.

Selection Universe. All stocks in the Index Universe that satisfy the following criteria, as of the rebalancing reference date, are selected and form the eligible universe.¹

- **FMC.** Stocks must have an FMC greater than or equal to U.S. \$50 billion.
- **GICS Sub-Industry.** Stocks must be classified as part of one of the following GICS Sub-Industries.² GICS classification changes are implemented at the subsequent reconstitution.

GICS Sector	GICS Sub-Industry	Code
Communication Services	Interactive Media & Services	50203010
	Movies & Entertainment	50202010
Consumer Discretionary	Broadline Retail	25503030
Information Technology	Systems Software	45103020
	Technology Hardware Storage & Peripherals	45202030
	Semiconductors	45301020
Financials	Transaction & Payment Processing Services	40201060

- **NACE³ Class:** Stocks that meet Broadline Retail (25503030) must be classified as one of the following NACE Classes. NACE classification changes are implemented at the subsequent reconstitution.

NACE Group	NACE Class	Code
Retail trade not in stores, stalls or markets (47.9)	Retail sale via mail order houses or via Internet	47.91
	Other retail sale not in stores, stalls or markets	47.99

- **Multiple Share Classes.** Each company is represented once by the most liquid share class line based on six-month MDVT as of the rebalancing reference date. The share class line included in the index may change if the six-month MDVT of the non-index share class line is twice as much as the included one.

In addition to the above, as of the rebalancing effective date, stocks must satisfy the following:

- **Growth Score.** Stocks' growth scores from the S&P Global BMI must be greater than or equal to 0.6.

For information on Growth Score calculation, please refer to the S&P Global BMI, S&P/IFCI Methodology.

Constituent Selection. At each rebalancing, rank CEDEAR's underlying stocks (U.S. listings) in descending order based on the product of the respective stock's Growth Score multiplied by FMC as of

¹ The analysis is conducted on the underlying security and represented in the index by the related CEDEAR.

² For history prior to September 2018, the eligible GICS sub-industries were mapped with the codes available prior to the GICS restructuring.

³ NACE (Nomenclature of Economic Activities) is the European statistical classification of economic activities.

the rebalancing reference date. The highest ranked 15 CEDEARs are selected for index inclusion, subject to a minimum of six.

If fewer than six CEDEARs are selected, the highest ranked non-constituent is selected until the minimum constituent count of six is met.

Constituent Weightings. At each rebalancing and reweighting, constituents are weighted by Momentum score, subject to a single stock weight cap of 20%.

For information on momentum score calculation, please refer to Appendix III.

Rebalancing/Reweighting. Index composition is rebalanced annually, effective after the market close on the third Friday of September. The rebalancing reference date is the last business day of July. In addition, the index is reweighted quarterly, effective after the market close on the third Friday of March, June, and December. Constituents' index shares are calculated using closing prices on the Wednesday prior to the second Friday of the rebalancing month as the reference price. Index share amounts are calculated and assigned to each stock to arrive at the weights determined on the reference date.

Index Maintenance

Index Calculations

The indices are calculated by means of the divisor methodology used in all S&P Dow Jones Indices' equity indices.

For more information on index calculations, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Corporate Actions

Non-Market Capitalization Weighted Indices. The S&P Merval Index, the S&P/BYMA Ingenius Index, and the S&P/BYMA CEDEAR Index follow a non-market capitalization weighted methodology.

For more information, please refer to the Non-Market Capitalization Weighted Indices section in S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Market Capitalization Weighted Indices. The S&P/BYMA Argentina General Index, S&P/BYMA Argentina General Sector Indices, and S&P/BYMA Domestic Focus Sector Indices are market capitalization weighted indices.

For more information, please refer to the Market Capitalization Weighted Indices section in S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Additions

Except for spin-offs, and as otherwise detailed, there are no additions between rebalancings.

Spin-Offs. The spun-off company is added to all indices of which the parent is a constituent at a zero price at the market close of the day before the ex-date. There is no divisor change. All key attributes of the spun-off company are the same as the parent's at the time of addition. The spun-off company is kept in the indices to be reevaluated at the subsequent index reconstitution.

Deletions

Between rebalancings, deletions can occur due to acquisitions, mergers, takeovers, bankruptcies or delistings.

GICS Reclassifications. For the S&P/BYMA Ingenius Index, constituents whose GICS classification changes intra-rebalancing to a non-eligible GICS are held until the subsequent rebalancing.

For more information, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Stock Suspensions

For more information on suspensions, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Liquidity Data

Daily Value Traded is calculated as: volume multiplied by transaction price including settlements in T, T+1, and T+2. Value Traded data are sourced from BYMA.

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.

Currency of Calculation and Additional Index Return Series

The indices are calculated in Argentine pesos and U.S. dollars.

Real-time spot Forex rates, as supplied by WMR, are used for ongoing index calculation of real-time indices.

WMR foreign exchange rates are taken daily at 3:00 PM New York Time and used in the end-of-day calculation of the indices. These mid-market fixings are calculated by WMR based on LSEG data and appear on LSEG pages.

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to the [S&P DJI Methodology & Regulatory Status Database](#).

For information on various index calculations, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at www.spglobal.com/spdji.

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 Merval Index (ARS)	01/14/2019	01/11/2019	01/11/2019	33,884.60
S&P Merval Index (ARS) TR	06/30/1986	06/30/1986	01/11/2019	0.01
S&P/BYMA Argentina General Index (ARS)	01/14/2019	01/11/2019	03/08/2019	1,433,042.31
S&P/BYMA Argentina General Index (ARS) TR	06/30/2000	06/30/2000	03/08/2019	1,433,095.04
S&P/BYMA Argentina General Energy (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Materials (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Industrials (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Consumer Discretionary (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Consumer Staples (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Health Care (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Financials (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000

Index	Launch Date	First Value Date	Base Date	Base Value
S&P/BYMA Argentina General Information Technology (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Communication Services (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Utilities (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Real Estate (Sector) Index (ARS)	08/05/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Construction Index (ARS)	10/07/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Argentina General Energy & Utilities Index (ARS)	10/07/2019	01/11/2019	01/11/2019	1000
S&P/BYMA Ingenius Index	08/22/2022	09/18/2020	09/18/2020	1000
S&P/BYMA CEDEAR Index	08/22/2022	09/18/2020	09/18/2020	1000

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 both 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.

For more information on the calculation of return types, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Index Governance

Index Committee

The S&P/BYMA Index Committee maintains the indices. All committee members are full-time employees of S&P Dow Jones Indices and The BYMA Group. The Index Committee meets regularly. At each meeting, the Index Committee may review 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.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

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 to all clients. Any unusual treatment of a corporate action or short notice of an event may be communicated via email to clients.

For more information, please refer to the Announcements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

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 as well as their corresponding weights and index shares effective for the upcoming rebalancing. Since index shares are assigned based on reference 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.spglobal.com/spdji for a complete schedule of rebalancing timelines and pro-forma delivery times.

Holiday Schedule

The indices are calculated all business days of the year, provided the BYMA is open.

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

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.

Index Closing Times

The indices follow the standard BYMA Exchange closing time.

Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Recalculation Policy

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Real-Time Calculation

Real-time, intra-day, index calculations are executed for certain indices, whenever the BYMA is open. Real-time indices are not restated.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

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.spglobal.com/spdji, major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

Tickers

The table below lists headline indices covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to the [S&P DJI Methodology & Regulatory Status Database](#) for a complete list of indices covered by this document.

Index	Return Type	BBG	RIC
S&P Merval Index (ARS)	Price Return Total Return	SPMERVAL Merval	-- .Merval
S&P Merval Index (USD)	Price Return Total Return	-- --	.SPMERVALUP .SPMERVALUT
S&P/BYMA Argentina General Index (ARS)	Price Return Total Return	SPBYMAIG IBG	-- .IBG
S&P/BYMA Argentina General Index (USD)	Price Return Total Return	-- --	.SPBYMAIGUP .SPBYMAIGUT
S&P/BYMA Argentina General Energy (Sector) Index (ARS)	Price Return Total Return	SPBYGEAP SPBYGEAT	-- SPBYMAIG10
S&P/BYMA Argentina General Materials (Sector) Index (ARS)	Price Return Total Return	SPBYGMAP SPBYGMAT	-- SPBYMAIG15
S&P/BYMA Argentina General Industrials (Sector) Index (ARS)	Price Return Total Return	SPBYGIAP SPBYGIAT	-- SPBYMAIG20
S&P/BYMA Argentina General Consumer Discretionary (Sector) Index (ARS)	Price Return Total Return	SPBYGDAP SPBYGDAT	-- SPBYMAIG25
S&P/BYMA Argentina General Consumer Staples (Sector) Index (ARS)	Price Return Total Return	SPBYGSAP SPBYGSAT	-- SPBYMAIG30
S&P/BYMA Argentina General Financials (Sector) Index (ARS)	Price Return Total Return	SPBYGFAP SPBYGFAT	-- SPBYMAIG40
S&P/BYMA Argentina General Communication Services (Sector) Index (ARS)	Price Return Total Return	SPBYGCAP SPBYGCAT	-- SPBYMAIG50
S&P/BYMA Argentina General Utilities (Sector) Index (ARS)	Price Return Total Return	SPBYGUAP SPBYGUAT	-- SPBYMAIG55
S&P/BYMA Argentina General Real Estate (Sector) Index (ARS)	Price Return Total Return	SPBYGRAP SPBYGRAT	-- SPBYMAIG60
S&P/BYMA Argentina General Construction Index (ARS)	Price Return Total Return	SPBYCAP SPBYCAT	-- SPBYCAP
S&P/BYMA Argentina General Energy & Utilities Index (ARS)	Price Return Total Return	SPBYUEAP SPBYUEAT	-- SPBYUEAP
S&P/BYMA Ingenius Index (ARS)	Price Return Total Return	SPBYIGAP SPBYIGAT	-- --
S&P/BYMA CEDEAR Index (ARS)	Price Return Total Return	SPBYCDAP SPBYCDAT	-- --

Index Data

Daily constituent and index level data are available via subscription.

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

Web site

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

Appendix I

Methodology Changes

Methodology changes since January 11, 2019, are as follows:

Index	Change	Effective Date (After Close)	Previous	Methodology	Updated																												
S&P/BYMA Ingenius Index	Eligibility Factors: GICS Classification.	07/31/2023	<p>GICS Classification. Stocks must be classified as one of the following sub-industries. GICS classification changes are implemented at the subsequent reconstitution.</p> <table border="1"> <thead> <tr> <th>Sector</th> <th>Sub-Industry</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Communication Services</td> <td>Interactive Media & Services (50203010)</td> </tr> <tr> <td>Movies & Entertainment (50202010)</td> </tr> <tr> <td>Consumer Discretionary</td> <td>Internet & Direct Marketing Retail (25502020)</td> </tr> <tr> <td rowspan="4">Information Technology</td> <td>Systems Software (45103020)</td> </tr> <tr> <td>Technology Hardware Storage & Peripherals (45202030)</td> </tr> <tr> <td>Data Processing & Outsourced Services (45102020)</td> </tr> <tr> <td>Semiconductors (45301020)</td> </tr> </tbody> </table>	Sector	Sub-Industry	Communication Services	Interactive Media & Services (50203010)	Movies & Entertainment (50202010)	Consumer Discretionary	Internet & Direct Marketing Retail (25502020)	Information Technology	Systems Software (45103020)	Technology Hardware Storage & Peripherals (45202030)	Data Processing & Outsourced Services (45102020)	Semiconductors (45301020)	<p>GICS Sub-Industry. Stocks must be classified as one of the following GICS Sub-Industries. GICS classification changes are implemented at the subsequent reconstitution.</p> <table border="1"> <thead> <tr> <th>Sector</th> <th>Sub-Industry</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Communication Services</td> <td>Interactive Media & Services (50203010)</td> </tr> <tr> <td>Movies & Entertainment (50202010)</td> </tr> <tr> <td>Consumer Discretionary</td> <td>Broadline Retail (25503030)</td> </tr> <tr> <td rowspan="3">Information Technology</td> <td>Systems Software (45103020)</td> </tr> <tr> <td>Technology Hardware Storage & Peripherals (45202030)</td> </tr> <tr> <td>Semiconductors (45301020)</td> </tr> <tr> <td>Financials</td> <td>Transaction & Payment Processing Services (40201060)</td> </tr> </tbody> </table> <p>NACE Class. Stocks that meet Broadline Retail (25503030) must be classified as one of the following NACE Classes. NACE classification changes are implemented at the subsequent reconstitution.</p> <table border="1"> <thead> <tr> <th>NACE Group</th> <th>NACE Class</th> </tr> </thead> <tbody> <tr> <td>Retail trade not in stores, stalls or markets - Retail sale via mail order houses or via Internet (47.91)</td> <td>Retail trade not in stores, stalls or markets - Other retail sale not in stores, stalls or markets (47.99)</td> </tr> </tbody> </table>	Sector	Sub-Industry	Communication Services	Interactive Media & Services (50203010)	Movies & Entertainment (50202010)	Consumer Discretionary	Broadline Retail (25503030)	Information Technology	Systems Software (45103020)	Technology Hardware Storage & Peripherals (45202030)	Semiconductors (45301020)	Financials	Transaction & Payment Processing Services (40201060)	NACE Group	NACE Class	Retail trade not in stores, stalls or markets - Retail sale via mail order houses or via Internet (47.91)	Retail trade not in stores, stalls or markets - Other retail sale not in stores, stalls or markets (47.99)
Sector	Sub-Industry																																
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S&P Merval Index	6-month Median Volume Traded Ratio	03/17/2023	<p>A minimum annualized six-month median value traded ratio (MVTR) of at least 10% (7% for current constituents).</p> <p>The ratio is calculated by taking the ARS MDVT amount for each of the 6 months preceding the rebalancing reference date, multiplying the monthly amount by the number of days that the stock traded during that month, and then dividing by its end-of-month FMC, also calculated in ARS. The sum of the six-monthly values, multiplied by two, is the MVTR for that stock.</p>		--																												
S&P Merval Index	Float-Adjusted Market Capitalization	03/17/2023	Stocks must have a float-adjusted market capitalization (FMC) of at least 2.5 billion Argentine Pesos (ARS) (ARS 2 billion for current constituents).		The stocks in the index universe are ranked in descending order based on FMC. Current constituents must be within the top 97%, and non-constituents within the top 95%, of the cumulative FMC of the index universe.																												
S&P Merval Index	Liquidity	03/17/2023	Stocks must have the following: 1. A minimum six-month median daily value traded (MDVT) greater than ARS 2.5 million (ARS 2 million for current constituents)		The stocks in the index universe are ranked in descending order based on six-month median daily value traded (MDVT). Current constituents must be within the top 97%, and non-constituents																												

Index	Change	Effective Date (After Close)	Methodology	
			Previous	Updated
				within the top 95%, of the cumulative six-month MDVT of the index universe.
S&P Merval Index	Constituent Selection	03/17/2023	At each rebalancing, all companies that meet the eligibility criteria are selected, with a minimum target count of 20 stocks. If for a given rebalancing, there are fewer than 20 stocks that meet the eligibility criteria, the market capitalization requirement will be relaxed to ARS 1.5 billion. If after this the minimum target of 20 eligible stocks is not met, then the next most liquid stock, based on six-month MDVT, will be selected until the minimum count of 20 stocks is reached.	At each rebalancing, all companies that meet the eligibility criteria are selected, with a minimum target count of 20 stocks. If for a given rebalancing there are fewer than 20 stocks that meet the eligibility criteria, then the stocks in the Selection Universe not complying with the liquidity requirement are ranked in descending order, based on six-month MDVT, and the next most liquid stock will be selected until the minimum count of 20 stocks is reached.
All S&P MERVAL and S&P/BYMA Indices	Liquidity Data	03/17/2023	Daily Value Traded is calculated as: volume multiplied by transaction price. Value Traded data are sourced from BYMA.	Daily Value Traded is calculated as: volume multiplied by transaction price including settlements in T, T+1, and T+2. Value Traded data are sourced from BYMA.
All S&P MERVAL and S&P/BYMA Indices	Exchange Rates	01/25/2019	WM/Refinitiv spot foreign exchange rates are taken daily at 4:00 PM New York Time and used in the end-of-day calculation of the indices.	WM/Refinitiv spot foreign exchange rates are taken daily at 3:00 PM New York Time and used in the end-of-day calculation of the indices.
S&P/BYMA Argentina General Index	Index Universe	03/15/2019	The index universe is defined as all stocks that trade on BYMA.	The index universe is defined as all stocks that trade on BYMA as domestic stocks. Country of domicile will be determined in accordance with the domicile policy described in S&P DJI's Equity Indices Policies & Practices Methodology.
S&P/BYMA Argentina General Index	IWF (Float Factor)	03/15/2019	--	Stocks must have an IWF of at least 5% as of the rebalancing reference date. IWFs will be determined using public information and calculated according to S&P DJI's Float Adjustment Methodology
S&P/BYMA Argentina General Index	Days traded	03/15/2019	--	Stocks must have traded in at least 20% of the trading sessions over the prior 12 months as of the rebalancing reference date.
S&P/BYMA Argentina General Index	Liquidity Criteria	03/15/2019	--	Stocks must have a 12-month MDVT greater than ARS 100,000 (ARS 50,000 for current constituents) as of the rebalancing reference date. If a stock has traded for less than 12 months, the available trading history will be annualized.
S&P/BYMA Argentina General Index	Constituent Weightings	03/15/2019	The index is weighted by total market capitalization	The index is weighted by float-adjusted market capitalization.
S&P/BYMA Argentina General Index	Rebalancing Schedule	03/15/2019	The index is rebalanced quarterly after the close on the third Friday of March, June, September and December.	The index is rebalanced annually prior to the market open on the Monday following the third Friday of March. As part of the rebalancing process, the index composition and constituent stock weights will be updated. The rebalancing reference date will be the third Friday of February. In addition, the index shares and weights will be updated quarterly prior to the market open on the Monday following the third Friday of June, September, and December.
S&P/BYMA Argentina General Index	Initial Public Offerings	03/15/2019	--	The criteria for inclusion of an IPO will be the same as that used at index rebalancings. In addition, IPOs will need to have a trading history of at least three-months as of the reference date. IPO additions will become effective prior to the market open on the Monday following the third Friday of March, June, September, and December. The reference date for IPO inclusions will be five weeks prior to the effective date. The market capitalization and liquidity criteria of IPOs will be evaluated as of the reference date. Since an IPO will have traded less than a full year, the trading value data that is available will be annualized for index eligibility purposes.
S&P MERVAL Index	Index Universe	03/15/2019	The index universe is defined as all stocks that trade on BYMA.	The index universe is defined as all stocks in the S&P/BYMA Argentina General Index adjusted for any composition changes due to the current rebalancing.
S&P MERVAL Index	IWF (Float Factor)	03/15/2019	--	Stocks must have an IWF of at least 5% as of the rebalancing reference date. IWFs will be determined using public information and calculated according to S&P DJI's Float Adjustment Methodology

Index	Change	Effective Date (After Close)	Methodology	
			Previous	Updated
S&P Merval Index	Size Criteria	03/15/2019	--	Stocks must have a float-adjusted market capitalization of at least ARS 2.5 billion (ARS 2 billion for current constituents) as of the rebalancing reference date.
S&P Merval Index	Days traded	03/15/2019	Stocks must have traded in at least 80% of the trading sessions over the prior six months as of the rebalancing reference date.	Stocks must have traded in at least 95% of the trading sessions over the prior six months as of the rebalancing reference date.
S&P Merval Index	Liquidity Criteria	03/15/2019	--	Liquidity requirements: 1. A minimum six-month Median Daily Value Traded (MDVT) requirement so that stocks must have a six-month MDVT greater than ARS 2.5 million (ARS 2 million for current constituents) as of the rebalancing reference date. 2. A minimum annualized six-month Median Value Traded Ratio (MVTR) so that stocks must have an annualized six-month MVTR of at least 10% (7% for current constituents) as of the rebalancing reference date.
S&P Merval Index	Index Construction	03/15/2019	<p>Index constituents are selected by calculating each eligible stock's participation coefficient as follows:</p> <ul style="list-style-type: none"> Calculate the Participation Coefficients based on each stock's weight in the total traded volume and the total number of trades from the prior six months: $Part_i = \sqrt{\frac{n_i}{N} \cdot \frac{v_i}{V}}$ where: Parti = Stock i's participation (weight) in the total amount of trades and effective traded volume. ni = Total number of trades of stock i over the prior six months. N = Total number of trades of the entire market over the prior six months. vi = Effective traded volume of stock i over the prior six months. V = Effective traded volume of the entire market over the prior six months. All coefficients are sorted in descending order. Only the securities among the aggregated 80% of participation are selected to compose the index. 	All companies meeting the eligibility criteria previously described are selected, subject to a minimum count of 20 stocks at a given rebalancing. If, for a given rebalancing, there are less than 20 stocks meeting the eligibility criteria, the market capitalization requirement will be relaxed to ARS 1.5 billion. If there are still fewer than 20 eligible stocks, then the next most liquid stocks based on their six-month MDVT will be selected until the minimum count of 20 stocks is reached
S&P Merval Index	Constituent Weightings	03/15/2019	<p>The index is weighted based on each stock's adjusted participation. The participation coefficient of all selected stocks is adjusted relative to the rest of the eligible stocks as follows:</p> $PartAj_i = \frac{Part_i}{\sum_{i=1}^n \sqrt{\frac{n_i}{N} \cdot \frac{v_i}{V}}}$ <p>where: PartAji = Stock i's adjusted participation (adjusted weight). n = Total number stocks selected for index inclusion.</p>	The index is weighted by float-adjusted market capitalization, subject to a 15% individual stock weight cap for diversification purposes.

Index	Change	Effective Date (After Close)	Methodology	
			Previous	Updated
S&P Merval Index	Rebalancing Schedule	03/15/2019	The index is rebalanced quarterly after the close on the third Friday of March, June, September and December.	The index is rebalanced semi-annually prior to the market open on the Monday following the third Friday of March and September. As part of the rebalancing process, the index composition and constituent stock weights will be updated. The rebalancing reference date will be the third Friday of February and August, respectively. In addition, the index shares and weights will be updated quarterly, effective prior to the market open on the Monday following the third Friday of June and December.
All S&P Merval and S&P/BYMA Indices	Shares Change Implementation	01/11/2019	The indices used BYMA share counts.	The indices use share counts as determined by S&P Dow Jones Indices.
All S&P Merval and S&P/BYMA Total Return Indices	Total Return Calculation	01/11/2019	BYMA total return indices employ a total return ("TR") calculation where cash dividends are reinvested at the open of trading on the ex-date. The dividend amount is reinvested into the company paying it rather than across all of the index constituents.	The indices follow S&P Dow Jones Indices' standard total return calculation Please refer to S&P Dow Jones Indices' Index Mathematics Methodology for more information on total return calculations.
All S&P Merval and S&P/BYMA Indices	Suspensions	01/11/2019	Suspended stocks are removed after five days of consecutive suspension.	The date to review suspended stocks and determine a potential index deletion is the last business day of February, May, August and November. Stocks that reach a suspension period of 60 days or more, as of the evaluation date, are subject to index deletion at the quarterly review effective at the open on the Monday following the third Friday in March, June, September and December. Suspended stocks use the last available official closing price prior to the suspension for index calculation during the suspension period. Suspended stocks are removed from the indices at a zero price
All S&P Merval and S&P/BYMA Indices	Spin-offs	01/11/2019	Spun-off entities are not added to the indices and are not reviewed for inclusion until the next rebalancing.	Spun-off entities are added to all indices of which the parent is a constituent. Spin-offs then are re-evaluated for continued index eligibility at the next rebalancing
All S&P Merval and S&P/BYMA Indices	Pro-forma Schedule and Pricing Reference Dates during Rebalancing	01/11/2019	Index shares are calculated using closing prices from the day before the rebalancing effective date.	Index Shares are calculated using closing prices from seven business days prior to the rebalancing effective date. Since index shares are assigned based on reference prices prior to the rebalancing, the actual weight of each stock at the rebalancing differs from these weights due to market movements.
All S&P Merval and S&P/BYMA Indices	Real-time Calculations	01/11/2019	The indices use VWAP or last traded price depending on trading during the last 20 minutes prior to the market close.	Consistent with international standards, the indices only use actual trades for intraday real-time index calculations.
All S&P Merval and S&P/BYMA Indices	Exchange Rates	01/11/2019	The Banco de la Nación Argentina's "Ask" Rate from the day before the ex-date is used for dividend conversions in the event that a constituent pays a dividend in an alternate currency, or the issuer does not provide a conversion rate.	The rates used are the same day WM/Refinitiv foreign exchange rates taken daily at 3:00 PM New York Time.

Index	Change	Effective Date (After Close)	Methodology	
			Previous	Updated
All S&P Merval and S&P/BYMA Indices	Rebalancing Schedule	01/11/2019	Rebalancing announcements are sent after the market close one day prior to the rebalancing effective date.	Rebalancing changes are announced five business days prior to the rebalancing effective date. Constituent pro-forma files are provided each time the indices rebalance. The pro-forma files are provided daily, in advance of the rebalancing date and contain all constituents and their corresponding weights and index shares effective for the upcoming rebalancing.
All S&P Merval and S&P/BYMA Indices	BYMA Indices Become S&P/Merval and S&P/BYMA Indices	01/11/2019	Index names are as follows: 1. Indice Merval 2. Indice General de la Bolsa de Comercio de Buenos Aires	Index names are as follows: 1. S&P Merval Index TR (ARS) 2. S&P/BYMA Argentina General Index TR (ARS)
All S&P Merval and S&P/BYMA Indices	Shares Changes Implementation	01/11/2019	Share changes are updated only at the quarterly rebalancings.	For more information, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.
All S&P Merval and S&P/BYMA Indices	Announcements of additions and deletions	01/11/2019	Advanced notice is provided for additions and deletions one day prior to the rebalance effective date	Additions and deletions are announced with one to five days advanced notice prior to any changes becoming effective.

Appendix II

ESG Disclosures

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY⁴		
1.	Name of the benchmark administrator.	S&P Dow Jones Indices LLC.
2.	Underlying asset class of the ESG benchmark.⁵	N/A
3.	Name of the S&P Dow Jones Indices benchmark or family of benchmarks.	S&P DJI Equity Indices Benchmark Statement
4.	Do any of the indices maintained by this methodology take into account ESG factors?	No
Appendix latest update:		January 2021
Appendix first publication:		January 2021

⁴ The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

⁵ The 'underlying assets' are defined in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

Appendix III

Momentum Value Calculation

Momentum value is calculated for each of the securities in the index universe on each of the rebalancing reference dates. The momentum value is determined as follows:

1. The momentum value is computed as the 12-month price change, excluding the most recent month of the security in **local** currency. If 12 months of price history is not available, momentum value is calculated from nine months of price history. The effective rebalancing month is stated as month (M).

a. Momentum Value = $\left(\frac{price_{M-2}}{price_{M-14}} \right) - 1$

b. Or, Momentum Value = $\left(\frac{price_{M-2}}{price_{M-11}} \right) - 1$ if 12 months of price history is not available.

NOTE 1: For example, if the effective rebalancing date is on 09/20/2021, the reference date is 07/30/2021, and the momentum value will be calculated based on the prices from 07/30/2021 ($price_{M-2}$) and 07/31/2020 ($price_{M-14}$).

NOTE 2: If there is no price available on day $M-2$ or day $M-14$, the price from the day prior will be used. If there is no price available on any of the ten days prior, the momentum value will be calculated using formula (b) above. If the same condition exists for formula (b), the stock is excluded from the index.

NOTE 3: For a stock to be included in the index, it must be trading for at least ten months prior to the rebalancing reference date.

2. The momentum value is adjusted by the security's volatility. For a given *positive* price change over the evaluation period, *lower* volatility improves the adjusted momentum value. For a given *negative* price change over the evaluation period, *higher* volatility improves the adjusted momentum value. When many securities within a given index universe experience negative price changes over a relevant evaluation period, the volatility adjustment may cause the selection of constituents with higher negative price changes.

$$\text{Risk-Adjusted Momentum Value} = \frac{\text{MomentumValue}_i}{\sigma_i}$$

where:

σ = Standard deviation of daily price returns for the same date period used in Step 1 above.

Z-Score & Momentum Score Computation

Z-Score Computation. Computing a z-score is a widely adopted method of standardizing a variable. The z-score for risk-adjusted momentum value for each security is calculated using the mean and standard deviation of the relevant variable within the index universe.

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} = Observed value for a given security

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

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

Winsorization reduces the impact of outliers on a data set by limiting them to a designated value or score. For the S&P/BYMA Ingenius Index, the winsorized z-score of a security is capped at ± 3 .

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

If $Z > 0$, Momentum Score = $1 + Z$

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

If $Z = 0$, Momentum Score = 1

Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index’s launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using “Backward Data Assumption” (or pulling back) of ESG data for the calculation of back-tested historical performance. “Backward Data Assumption” is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as “product involvement”) were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on “Backward Data Assumption” please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific

data points and relevant time period for which backward projected data was used. Index returns shown do not represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any assets.

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