

## Bolsas y Mercados Argentinos Indices Methodology Consultation Results

**BUENOS AIRES, DECEMBER 20, 2018:** In March 2018, Bolsas y Mercados Argentinos (“BYMA”) and S&P Dow Jones Indices (“S&P DJI”) signed an Index Operation and License Agreement. The partnership between BYMA and S&P DJI, the world’s leading provider of index-based concepts, data and research, includes the adoption of international index methodology standards and the integration of operational processes and business strategies and enhances the visibility, governance, and transparency of the existing indices. The agreement also enables the development, licensing, distribution and management of current and future indices which will be designed to serve as innovative and practical tools for local and global investors. The new and existing BYMA indices will be co-branded under the “S&P MERVAL” and “S&P/BYMA” names (the “Indices”) that can be used to underlie liquid financial products, expanding the breadth and depth of the Argentine capital market.

As part of this transition, S&P DJI and BYMA have conducted a consultation with members of the investment community on potential changes to the following BYMA indices to ensure that they continue to meet their objectives and are aligned with the needs of local and international market participants.

- BYMA Argentina General Index (Also known as Índice General de la Bolsa de Comercio de Buenos Aires)
- MERVAL Index
- MERVAL Argentina Index

### S&P DJI SUPPORTING DOCUMENTS

These consultation results are meant to be read in conjunction with supporting documents providing greater detail with respect to the S&P DJI policies, procedures and calculations described herein. References throughout these consultation results direct the reader to the relevant S&P DJI supporting document for further information on a specific topic. The list of the main S&P DJI supplemental documents for these consultation results and the hyperlinks to those documents is as follows:

Supporting Documents	URL
S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology	<a href="#">Equity Indices Policies &amp; Practices</a>
S&P Dow Jones Indices’ Index Mathematics Methodology	<a href="#">Index Mathematics Methodology</a>
S&P Dow Jones Indices’ Float Adjustment Methodology	<a href="#">Float Adjustment Methodology</a>

### METHODOLOGY CHANGES

The methodology changes, applicable to the specific BYMA indices, are summarized on the following pages.

### INDEX ANNOUNCEMENT

## BYMA Argentina General Index

The BYMA Argentina General Index is designed to serve as a broad country benchmark of the Argentine market. To ensure that the index continues to meet its objective, S&P DJI and BYMA will make the following changes to the eligibility criteria and rebalancing schedule:

Index Universe	
Current	The index universe is defined as all stocks that trade on BYMA.
Updated	In order to better represent the Argentine market, S&P DJI and BYMA will modify the index universe so that it 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.

Investable Weight Factor (Float Factor)	
Current	--
Updated	In order to ensure that a minimum number of shares are available to the general public, S&P DJI and BYMA will establish a minimum Investable Weight Factor (IWF) requirement so that 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.

Days Traded	
Current	--
Updated	In order to enhance index liquidity, S&P DJI and BYMA will introduce a minimum days traded requirement so that stocks must have traded in at least 20% of the trading sessions over the prior 12 months as of the rebalancing reference date.

12-month Median Daily Value Traded (MDVT)	
Current	--
Updated	In order to enhance index liquidity, S&P DJI and BYMA will introduce a minimum 12-month MDVT requirement so that 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.

Constituent Weightings	
Current	The index is weighted by total market capitalization
Updated	In order to better reflect the weight of index constituents relative to the market, S&P DJI and BYMA will modify the constituent weightings process so that the index is weighted by float-adjusted market capitalization.

Rebalancing Schedule	
Current	The index is rebalanced quarterly after the close on the third Friday of March, June, September and December.
Updated	In order to reduce turnover, S&P DJI and BYMA will modify the rebalancing schedule so that 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.

<b>Initial Public Offerings (IPO)</b>	
Current	--
Updated	<p>S&amp;P DJI and BYMA will standardize the treatment of IPOs so that IPO additions to the index take place on a quarterly basis. 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.</p> <p>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.</p>

## MERVAL Index

The MERVAL is the flagship index of the Argentine equity market. The index is designed to be investable and measure the performance of the largest and most liquid stocks listed in Argentina. To ensure that the index continues to meet its objective, S&P DJI and BYMA will make the following changes to the eligibility criteria, index construction, and rebalancing schedule:

<b>Index Universe</b>	
Current	The index universe is defined as all stocks that trade on BYMA.
Updated	In order to provide a more detailed description of the index universe, S&P DJI and BYMA will modify the index universe so that it is defined as all stocks in the S&P/BYMA Argentina General Index adjusted for any composition changes due to the current rebalancing.

<b>Investable Weight Factor (Float Factor)</b>	
Current	--
Updated	In order to ensure that a minimum number of shares are available to the general public, S&P DJI and BYMA will establish a minimum Investable Weight Factor (IWF) requirement so that 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.

<b>Market Capitalization</b>	
Current	--
Updated	In order to better reflect the objective of the index, S&P DJI and BYMA will establish a minimum market capitalization requirement so that 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.

<b>Days Traded</b>	
Current	Stocks must have traded in at least 80% of the trading sessions over the prior six months as of the rebalancing reference date.
Updated	In order to enhance index liquidity, S&P DJI and BYMA will modify the days traded requirement so that stocks must have traded in at least 95% of the trading sessions over the prior six months as of the rebalancing reference date.

Liquidity Criteria	
Current	--
Updated	<p>In order to enhance index liquidity, S&amp;P DJI and BYMA will introduce two liquidity requirements:</p> <ol style="list-style-type: none"> <li>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.</li> <li>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.</li> </ol>

Index Construction Process	
Current	<p>Index constituents are selected by calculating each eligible stock's participation coefficient as follows:</p> <ol style="list-style-type: none"> <li>1. 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: <math display="block">Part_i = \sqrt{\frac{n_i}{N} * \frac{v_i}{V}}</math> <p>where:</p> <p><math>Part_i</math> = Stock <math>i</math>'s participation (weight) in the total amount of trades and effective traded volume.</p> <p><math>n_i</math> = Total number of trades of stock <math>i</math> over the prior six months.</p> <p><math>N</math> = Total number of trades of the entire market over the prior six months.</p> <p><math>v_i</math> = Effective traded volume of stock <math>i</math> over the prior six months.</p> <p><math>V</math> = Effective traded volume of the entire market over the prior six months.</p> </li> <li>2. All coefficients are sorted in descending order. Only the securities among the aggregated 80% of participation are selected to compose the index.</li> </ol>
Updated	<p>In order to simplify the index construction process, S&amp;P DJI and BYMA will modify it so that 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.</p>

Constituent Weightings	
Current	<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> $PartA_{j_i} = \frac{Part_i}{\sum_{i=1}^n \sqrt{\frac{n_i}{N} * \frac{v_i}{V}}}$ <p>where:</p> <p><math>PartA_{j_i}</math> = Stock <math>i</math>'s adjusted participation (adjusted weight).</p> <p><math>n</math> = Total number stocks selected for index inclusion.</p>
Proposed	<p>In order to better reflect the weight of index constituents relative to the market, S&amp;P DJI and BYMA will modify the constituent weightings process so that the index is weighted by float-adjusted market capitalization, subject to a 15% individual stock weight cap for diversification purposes.</p>

<b>Rebalancing Schedule</b>	
Current	The index is rebalanced quarterly after the close on the third Friday of March, June, September and December.
Proposed	In order to reduce turnover, S&P DJI and BYMA will modify the rebalancing schedule so that 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.

## **MERVAL Argentina Index**

The MERVAL Argentina Index is designed to measure the performance of the largest and most liquid Argentine-domiciled stocks. To ensure that the index continues to meet its objective, S&P DJI and BYMA will make the following change to constituent weightings:

<b>Constituent Weightings</b>	
Current	<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> $PartA_{j_i} = \frac{Part_i}{\sum_{i=1}^n \sqrt{\frac{n_i}{N} * \frac{v_i}{V}}}$ <p>where:</p> <p><math>PartA_{j_i}</math> = Stock <i>i</i>'s adjusted participation (adjusted weight).</p> <p><math>n</math> = Total number stocks selected for index inclusion.</p>
Proposed	In order to better reflect the weight of index constituents relative to the market, S&P DJI and BYMA will modify the constituent weightings process so that the index is weighted by float-adjusted market capitalization, subject to a 15% individual stock weight cap for diversification purposes.

## **IMPLEMENTATION TIMING**

The S&P/BYMA co-branded methodology will be published on S&P DJI's website on Monday, January 14, 2019 (the "Transition Date"). The co-branded methodology will reflect the new rules previously described and will have an appendix detailing the methodology changes taking effect on the Transition Date. Please note that any modifications to an index's constituents or weights due to these new rules will not be reflected in the index until its first post-Transition Date rebalancing effective date.

## ABOUT S&P DOW JONES INDICES

S&P Dow Jones Indices is the largest global resource for essential index-based concepts, data and research, and home to iconic financial market indicators, such as the S&P 500® and the Dow Jones Industrial Average®. More assets are invested in products based on our indices than products based on indices from any other provider in the world. Since Charles Dow invented the first index in 1884, S&P DJI has been innovating and developing indices across the spectrum of asset classes helping to define the way investors measure and trade the markets.

S&P Dow Jones Indices is a division of S&P Global (NYSE: SPGI), which provides essential intelligence for individuals, companies and governments to make decisions with confidence. For more information, visit [www.spdji.com](http://www.spdji.com).

## ABOUT BOLSAS Y MERCADOS ARGENTINOS

BYMA is the evolution of the Argentine capital market, combining liquidity, knowledge and professionalism, to face the challenges and demands of today's world, transforming investment in work and development for the country.

BYMA offers institutions, companies, and the general public secure and transparent access to the investment world. It integrates all the stages in the cycle of a security's transaction in Argentina, including listing, trading, clearing and settlement services, as well as custody through its controlled company, Caja de Valores. BYMA's equity indices have a long history and are undisputed benchmarks for market participants, providing an entry point for international investors. For more information, visit [www.byma.com.ar](http://www.byma.com.ar).

### FOR MORE INFORMATION:

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