S&P Dow Jones Indices

A Division of S&P Global

The S&P/B3 Brazil ESG Index: A New Benchmark for Sustainability and Investment

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INTRODUCTION

Indices that integrate environmental, social, and governance (ESG) data are moving from the margins to the mainstream, as investors increasingly seek to align their values with their investments. A new type of ESG index is emerging to facilitate this change in Brazil: the S&P/B3 Brazil ESG Index. Jointly developed by S&P Dow Jones Indices (S&P DJI) and the Brazilian stock exchange (Brasil Bolsa Balcão [B3]), this index not only highlights strong ESG companies—as ESG indices have traditionally done—but it also enables allocation to such companies without requiring investors to take on major risks relative to the market.

THE EVOLUTION OF ESG INDICES

In 1999, S&P DJI launched the first global ESG index, the <u>Dow Jones SustainabilityTM World Index (DJSI World)</u>. By including the top 10% of companies, industry by industry, according to their ESG performance, as determined by the Corporate Sustainability Assessment (CSA) conducted by S&P Global,¹ this groundbreaking index encouraged companies to incorporate many ESG factors in their decisions, extending beyond short-term financial considerations.

In the years that followed, other indices, including regional versions of the DJSI World, such as the <u>DJSI Emerging Markets</u>, were launched with this same philosophy in mind: to highlight best-in-class companies and thereby inspire companies to improve their ESG approaches in order to qualify for inclusion in these indices.

Though these indices have been successful and have indeed inspired companies to change in positive ways, aspects of their methodologies present challenges for many investors. Some strategies can be too narrow for investors who want to remain broadly diversified. Though many high-conviction investors use the narrow, best-in-class indices for investment, we saw a need from market participants for ESG indices with the potential to provide returns more in line with the broader market, while providing a more sustainable portfolio of companies. An example of an index that

¹ For more information on the S&P Global CSA, please refer to https://www.spglobal.com/esg/csa/about/.

launched in 2019 that typifies this investor-oriented methodology is the $\underline{S\&P}$ $\underline{500^{\$}\ ESG\ Index}$.

The philosophy behind the S&P/B3 Brazil ESG Index is to maintain breadth while aligning with the values of sustainability-focused investors.

With the launch of the S&P/B3 Brazil ESG Index, Brazil now has an investor-oriented ESG index of its own. This index maintains a large portion of the companies in its underlying index, the <u>S&P Brazil BMI</u>, thereby staying broad and diverse while still screening out companies involved in certain business activities and controversies, as well as those with sustainability profiles that run counter to ESG investors' preferences.

HOW THE INDEX WORKS

The philosophy behind the S&P/B3 Brazil ESG Index is to maintain broad market exposure while aligning with the values of sustainability-focused investors.

The first step is to exclude companies involved in certain business activities contrary to general ESG values.

As shown in Exhibit 1, the first step is to exclude companies involved in certain business activites contrary to general ESG values. For companies involved in tobacco, controversial weapons, and thermal coal, certain maximum revenue thresholds are set, as defined in the <u>index methodology</u>. If a company generates revenue exceeding these thresholds, it will be excluded at the annual index rebalance that takes place the last business day of April each year. Companies with business practices out of alignment with the United Nations Global Compact (UNGC)² are also excluded at the annual rebalance. The exclusion criteria used in Step 1 are provided by Sustainalytics.³

Once these exclusions are implemented, an additional screen is applied: companies without S&P DJI ESG Scores⁴ are eliminated. Once this is done, the list of companies eligible for the sorting and selection process has been defined.

An additional screen is applied using the S&P DJI ESG Scores.

The remaining companies are then weighted by their ESG scores, subject to certain weighting constraints defined in the methodology. This way, while companies with poor ESG scores can be included, they are given a low weight in the index.

² For more information on the UN Global Compact, please refer to https://www.unglobalcompact.org/.

For more information on Sustainalytics, including the Global Standards Screening Methodology, please refer to https://www.sustainalytics.com/.

⁴ See the FAQ: S&P DJI ESG Scores for more information.

Exhibit 1: S&P/B3 Brazil ESG Index Methodology Summary

Objective: S&P DJI ESG score-weighted, broadbased index that measures the performance of securities meeting the sustainability criteria.

Step 1:

Exclude companies involved in tobacco, controversial weapons, or thermal coal.

Step 2:

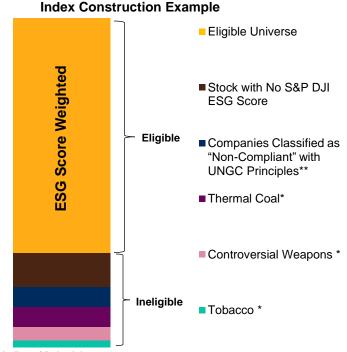
Exclude companies classified as Non-Compliant according to Sustainalytics Global Standards Screening (GSS).**

Step 3:

Exclude companies with no S&P DJI ESG Score.

Step 4:

Weight companies by S&P DJI ESG Score, subject to a single security weight cap with each security's weight capped at the lower of 10% and four times its liquidity weight.



^{*} S&P DJI Level of Involvement threshold as defined in the S&P/B3 Indices Methodology.

Source: S&P Dow Jones Indices LLC. Chart is provided for illustrative purposes.

The result is an index that retained 96 constituents, 58% of the original 165 stocks in the S&P Brazil BMI, effective after the close of April 30, 2020, the most recent rebalance.⁵ These constituents represented 59% of the S&P Brazil BMI's market capitalization.

Exhibit 2: Top 10 Constituents by Weight				
CONSTITUENT	GICS® SECTOR	ESG SCORE	INDEX WEIGHT (%)	WEIGHT IN BENCHMARK (%)
Banco do Brasil	Financials	96	4.6	2.1
Itausa Investimentos Itau S.A Pref	Financials	94	4.5	2.5
Lojas Renner SA	Consumer Discretionary	92	4.4	1.9
Itau Unibanco Holding SA Pref	Financials	93	4.1	6.8
Cia Energetica de Minas Gerais Pref	Utilities	93	3.7	0.6
Cielo SA	Information Technology	88	3.6	0.3
Natura &Co Holding S.A.	Consumer Staples	74	3.5	1.4
Banco Bradesco Pref	Financials	94	3.5	5.2
Cogna Educacao S.A.	Consumer Discretionary	74	3.5	0.6
Telefonica Brasil S.A. Pref	Communication Services	65	2.9	1.2

Source: S&P Dow Jones Indices LLC. Data as of latest rebalance effective after the close of April 30, 2020. Table is provided for illustrative purposes.

^{**} Non-constituents that are on the Watchlist or are Non-Compliant, according to Sustainalytics, are ineligible for index inclusion. Existing constituents that are on the Watchlist will not be removed from the index unless they become Non-Compliant.

^{***} S&P DJI has introduced additional, expanded and revised <u>exclusions</u> based on a company's involvement in certain defined business activities. The additional exclusions cover oil sands, small arms and military contracting; the expanded exclusions cover controversial weapons; and the revised exclusions cover tobacco. The previously described methodology changes were effective in conjunction with the April 2022 rebalancing.

⁵ Coverage in previous years was greatly reduced due to lack of coverage of ESG data.

At any time, a constituent can be removed from the S&P/B3 Brazil ESG Index if it is involved in a severe enough controversy The increasing awareness of the relevance of ESG topics for companies and market participants is reflected in the coverage increase over time and historical constituent count (see Exhibit 3).

Exhibit 3: Constituent Count				
YEAR	S&P Brazil BMI	S&P/B3 Brazil ESG Index		
2014	185	63		
2015	180	66		
2016	151	72		
2017	143	61		
2018	147	74		
2019	151	72		
2020	165	96		

Source: S&P Dow Jones Indices LLC. Data from April 30, 2014, to Sept. 30, 2020. Table is provided for illustrative purposes.

If a company is removed, it is not eligible for index re-entry for one full calendar year, beginning with the subsequent rebalancing.

ACCOUNTING FOR CONTROVERIES

At any time, a constituent can be removed from the S&P/B3 Brazil ESG Index if it is involved in a severe enough controversy, as determined by S&P Global's Media & Stakeholder Analysis (MSA). An MSA may be triggered by a wide range of controversies, including those related to economic crime and corruption, fraud, illegal commercial practices, human rights issues, labor disputes, workplace safety, catastrophic accidents, and environmental disasters.

When a severe controversy emerges, the S&P DJI Index Committee meets to review the MSA and to determine whether a company should be removed. If a company is removed, it will not be eligible for re-entry into the index for one full calendar year, beginning with the subsequent rebalancing.

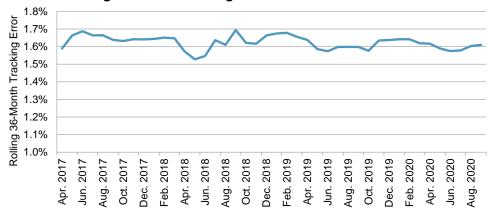
An MSA Case Study

The increasing awareness of the relevance of ESG topics is reflected in the coverage increase over time and historical constituent count. On Dec. 8, 2020, S&P Dow Jones Indices' S&P/B3 Equity Indices Committee announced that it will remove Atacadao S.A., a Carrefour subsidiary, from the S&P/B3 Brazil ESG Index. This decision followed a Media & Stakeholder Analysis (MSA) that was triggered by an incident at a Carrefour supermarket in Porto Alegre in Brazil, where a black man was beaten by security guards. Our ESG index methodology requires incidents like these to be fully reviewed for potential removal. The earliest Atacadao S.A. would be eligible for re-entry into the index would be April 2022, one year from the next rebalance.

PERFORMANCE OF THE S&P/B3 BRAZIL ESG INDEX

The appeal of a broader ESG index is that it has historically provided similar return to the underlying index... The appeal of broader ESG indices like the S&P/B3 Brazil ESG Index is that they have historically provided an opportunity for similar return to the underlying index—and even the potential for outperformance—without taking on considerable risk associated with narrower ESG indices. The index has historically maintained a relatively low tracking error compared to the S&P Brazil BMI of 1.6%.

Exhibit 4: Rolling 36-Month Tracking Error



S&P/B3 Brazil ESG Index Tracking Error vs. S&P Brazil BMI

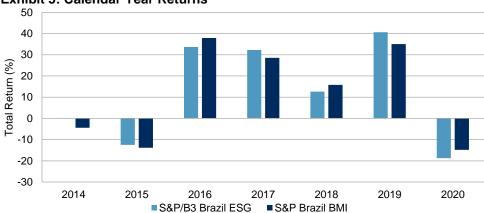
Source: S&P Dow Jones Indices LLC. Data from April 30, 2014, to Sept. 30, 2020. Index performance based on total return in BRL. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Notwithstanding its historic benchmark-like return, in four of the past seven years, the S&P/B3 Brazil ESG Index outperformed the S&P Brazil BMI (see Exhibit 5).

...and maintained a relatively low tracking error relative to the benchmark.

In four of the past seven years, the S&P/B3 Brazil ESG Index outperformed its benchmark.





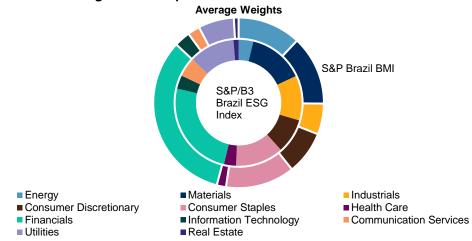
Source: S&P Dow Jones Indices LLC. Data from April 30, 2014, to Sept. 30, 2020. Index performance based on total return in BRL. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

What is the source of this low tracking error and benchmark-like return?

What is the source of this low tracking error and benchmark-like return? A major factor could be the similarity of the sector compositions of this new ESG index with respect to its underlying index. As Exhibit 6 illustrates, the sector compositions of these indices have been largely in line with each other.

A major factor could be the similarity of the sector compositions of this new ESG index with respect to its

underlying index.



To ensure the ESG index is more values focused, we calculate a composite ESG score to compare it with its underlying index. Source: S&P Dow Jones Indices LLC. Data from April 30, 2014, to Sept. 30, 2020, for average sector weights at rebalance. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

ESG IMPROVEMENT

Exhibit 6: Average Sector Exposure Chart

The aim of excluding certain companies involved in less-sustainable business activities and controversies and tilting the index weights toward those companies with higher S&P DJI ESG Scores is to ensure the index reflects a more values-focused portfolio. But how is this measured?

One way is to calculate a composite ESG score for the S&P/B3 Brazil ESG Index and compare this with the composite score for its underlying index. For the S&P/B3 Brazil ESG Index, the composite ESG score was 57.7, which was 9.8 points higher than the 47.9 composite ESG score of the S&P Brazil BMI, representing a 20.4% realized ESG potential.⁶

ESG improvements compared with the benchmark on the sector level over time provide an interesting analysis. For sectors historically represented by more than one company, the average improvement was 5.1 over the seven-year period starting at the 2014 rebalance. It is also worth noting that it is possible to observe a decrease in ESG qualities; this happens when a company with a relatively good ESG score is excluded in the first

step. In the S&P/B3 Brazil ESG Index, this scenario happened for the Energy sector historically (see Exhibit 7).

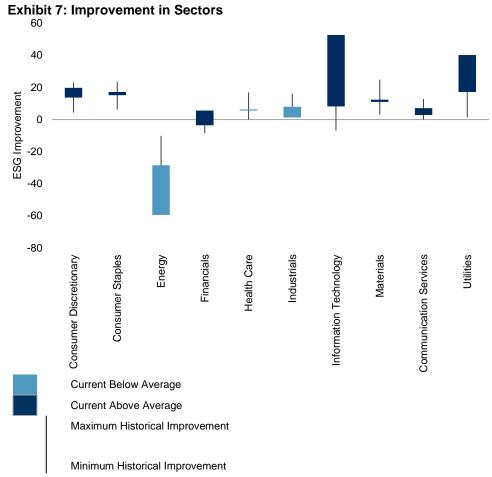
The composite ESG score for the S&P/B3 Brazil ESG Index was 57.7, 9.8 points higher than that of the benchmark.

⁶ Realized ESG potential is calculated as the percentage difference between the aggregate S&P DJI ESG Scores of the S&P/B3 Brazil ESG Index and the S&P Brazil BMI, relative to the strategy's maximum potential ESG improvement based on investing only in the single highest-ranked ESG scoring company in the benchmark.

ESG improvements compared with the benchmark on the sector level over time provide an interesting analysis.

The S&P/B3 Brazil ESG Index is a benchmark for a new era of ESG investing...

...one in which indices are built not just to measure company performance but also to provide model portfolios for broad, diversified investments.



Source: S&P Dow Jones Indices LLC. Data from April 30, 2014, to Sept. 30, 2020, for average sector improvement at rebalance. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 8 shows a few examples of the numerous ways in which the S&P/B3 Brazil ESG Index offers enhanced ESG representation. Increased index exposures to each ESG theme in these metrics are calculated using the most granular question-level data in S&P Global's CSA.

Exhibit 8: The Benefits of the S&P/B3 Brazil ESG Index









12%

higher exposure to companies with GHG emission reduction targets

11%

higher exposure to companies with third-party verified GHG emission, energy, waste, and water data

7%

higher exposure to companies that have not paid significant environmental-related fines in the past four years

12%

higher exposure to companies assessing human rights issues across their entire value chain

10%

higher exposure to companies actively monitoring and disclosing diversity-related metrics

7%

higher exposure to companies with childcare support and parental leave policies in excess of the legally-required minimum

12%

Governance

higher exposure to companies with no confirmed cases of corruption and bribery in the past four years

11%

higher exposure to companies that conducted a materiality analysis and identified long-term targets to measure progress

8%

higher exposure to companies where no governmental institution owns significant voting rights

Source: S&P Dow Jones Indices LLC. These are just a few examples of the numerous ways in which the S&P/B3 Brazil ESG Index offers enhanced ESG representation. Increased index exposure to each ESG theme in the metrics above are calculated using the question-level data in S&P GLobal's Corporate Sustainability Assessments (2019 methodology year). These metrics are calculated using index data as of Sept. 30, 2020, as the percentage difference between the performance of the S&P/B3 Brazil ESG Index and the S&P Brazil BMI constituents across these metrics, on a weighted average basis.

CONCLUSION

The S&P/B3 Brazil ESG Index is a benchmark for a new era in ESG, one in which indices are designed not just to measure company performance but also to reflect breadth and diversification. As these indices garner more interest, companies that invest in ESG have the potential to benefit in terms of public perception.

PERFORMANCE DISCLOSURE

The S&P/B3 Brazil ESG Index was launched August 31, 2020. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index 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. Complete index methodology details are available at www.spdji.com. Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown.

S&P Dow Jones Indices 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 at a fixed value for calculation purposes. The Launch Date designates the date upon which 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 Dow Jones Indices 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 datafeed 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.

The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com 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.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

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