

## SPIVA<sup>®</sup> Latin America Scorecard

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### SUMMARY

The S&P Indices Versus Active (SPIVA) Latin America Scorecard compares the performance of actively managed mutual funds in Brazil, Chile, and Mexico to their benchmarks over 1-, 3-, 5-, and 10-year periods.

March 2020 presented the largest single-month drawdown in at least 10 years for all categories. The majority of equity active managers in Chile and Mexico failed to outperform, especially over longer periods. The Brazilian large-cap segment did a bit better and active managers were able to beat their benchmark over the one- and three-year periods. However, even this advantage disappeared over longer periods.

### Brazil

- After four years of double-digit returns in the Brazilian equity market, the [S&P Brazil BMI](#) fell 15.62% during the first half of the year. The COVID-19-driven sell-off had an impact on all Brazilian equity market segments. Large- and mid-small-cap companies presented negative returns of 15.81% and 15.20%, respectively, as measured by the S&P Brazil LargeCap and S&P Brazil MidSmallCap.
- During the first half of 2020, the National Monetary Council cut policy interest rates (Selic) by 225 bps from 4.5% to 2.25%, as of June 30, 2020.<sup>1</sup> In this low rate environment,<sup>2</sup> equity funds in three segments (Brazil Equity Funds, Brazil Large-Cap Funds, and Brazil Mid-/Small-Cap Funds) posted noteworthy performance, despite the overall negative performance of the asset class. Survivorship rates for the one- and three-year horizons increased, compared with the SPIVA Latin America Year-End 2019 Scorecard, especially the Brazil Mid-/Small-Cap Funds and Brazil Equity Funds, which increased their three-year survivorship rate by 8.11% and 2.06%, respectively, (see Report 2 and Exhibit 1).

<sup>1</sup> <https://www.bcb.gov.br/estatisticas>

<sup>2</sup> Brazil had double-digit reference rates until June 2017, when the Selic rate moved from 10.25% to 9.25%.

- Over the one-year period, most active fund managers outperformed their benchmarks in three of the five categories: 57.65% of Brazil Equity Fund managers, 63.16% of the Brazil Large-Cap Fund managers, and 52.59% of the Brazil Corporate Bond Fund managers beat their benchmarks. Active managers from all categories fared poorly relative to their respective benchmarks over the 5- and 10-year periods (see Report 1).
- All categories, except for Brazil Government Bond Funds, showed that over the one-year period, larger funds performed worse than smaller funds. However, over the 10-year horizon, larger funds performed better than smaller funds on an equal-weighted basis (see Report 3) versus an asset-weighted basis (see Report 4).

## Chile

- The Chilean equity market continued its negative trend, returning -21.69% over the 12-month period ending in June 2020, as measured by the [S&P Chile BMI](#). Volatility in Chile started before COVID-19 due to the civil unrest starting Oct. 18, 2019.
- The majority of active equity fund managers underperformed the S&P Chile BMI over the 3-, 5-, and 10-year periods, with the median of funds underperforming the benchmark by 1.68%, 2.71%, and 2.34%, respectively (see Report 5). The performance was worse over longer time horizons, with 93.02% and 100.00% of funds underperforming the benchmark over the 5- and 10-year periods, respectively.
- Smaller funds performed relatively better than larger funds over all time horizons on an equal-weighted basis (see Report 3) versus an asset-weighted basis (see Report 4).

## Mexico

- The S&P/BMV IRT fell 12.81% over the first half of 2020. For the 12-month period ending June 30, 2020, the index was down 10.87%. The majority of active managers underperformed the S&P/BMV IRT over all periods observed. Despite the volatile circumstances over the 12-month period, 64.0% of funds underperformed the benchmark.
- Median fund underperformance was 1.42%, 0.71%, 1.93%, and 1.69% for the 1-, 3-, 5-, and 10-year periods, respectively. The best managers in the category (first quartile) outperformed the S&P/BMV IRT by 96 bps over the 1- and 3-year periods, but could not sustain this outperformance for longer periods, ultimately underperforming by 16 bps over the 10-year horizon.
- The survival rates over the one- and three-year horizons were reduced by 4.04% from the SPIVA Latin America Year-End 2019 Scorecard (see Exhibit 1). The three- and five-year survival rates of Mexico Equity Funds were the highest of Latin America, at 91.49% and 88.64%, respectively.

## A UNIQUE SCORECARD FOR THE ACTIVE VERSUS PASSIVE DEBATE

Beyond the SPIVA Scorecard's widely cited headline numbers is a rich data set that addresses issues of measurement techniques, universe composition, and fund survivorship that are less frequently discussed but are often fascinating. These data sets are rooted in the fundamental principles of the SPIVA Scorecard, with which regular readers will be familiar, including the following:

- **Survivorship Bias Correction:** Many funds might be liquidated or merged during a period of study. However, for someone making an investment decision at the beginning of the period, these funds are part of the opportunity set. Unlike other commonly available comparison reports, SPIVA Scorecards account for the entire opportunity set, not just the survivors, thereby eliminating survivorship bias.
- **Asset-Weighted Returns:** Average returns for a fund group are often calculated using only equal weighting, which means the returns of a relatively large (by net assets) fund affect the category average in the same manner as the returns of a relatively small fund. An accurate representation of how market participants fared in a particular period can be found by calculating weighted average returns, in which each fund's return is weighted by net assets. SPIVA Scorecards show both equal- and asset-weighted averages.
- **Data Cleaning:** SPIVA Scorecards avoid double counting multiple share classes in all count-based calculations by using only the share class with greatest assets. Index, leveraged, and inverse funds, along with other index-linked products, are excluded from the results, as this is meant to be a scorecard for active managers.

## REPORTS

Report 1: Percentage of Funds Outperformed by the Benchmark					
FUND CATEGORY	COMPARISON INDEX	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)
Brazil Equity Funds	S&P Brazil BMI	42.35	70.96	80.37	84.23
Brazil Large-Cap Funds	S&P Brazil LargeCap	36.84	42.70	54.02	81.82
Brazil Mid-/Small-Cap Funds	S&P Brazil MidSmallCap	60.00	85.29	85.54	91.11
Brazil Corporate Bond Funds	Anbima Debentures Index (IDA)	47.41	87.75	91.95	88.46
Brazil Government Bond Funds	Anbima Market Index (IMA)	80.00	74.47	79.48	85.21
Chile Equity Funds	S&P Chile BMI	58.97	80.49	93.02	100.00
Mexico Equity Funds	S&P/BMV IRT	64.00	63.83	79.55	81.82

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Outperformance is based on equal-weighted fund counts. Index performance based on total return in local country currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 2: Fund Survivorship</b>		
<b>FUND CATEGORY</b>	<b>NO. OF FUNDS AT START</b>	<b>SURVIVORSHIP (%)</b>
<b>1-YEAR</b>		
Brazil Equity Funds	255	96.08
Brazil Large-Cap Funds	114	97.37
Brazil Mid-/Small-Cap Funds	80	98.75
Brazil Corporate Bond Funds	116	87.07
Brazil Government Bond Funds	285	94.04
Chile Equity Funds	39	89.74
Mexico Equity Funds	50	94.00
<b>3-YEAR</b>		
Brazil Equity Funds	272	75.37
Brazil Large-Cap Funds	89	85.39
Brazil Mid-/Small-Cap Funds	68	83.82
Brazil Corporate Bond Funds	204	36.27
Brazil Government Bond Funds	282	80.50
Chile Equity Funds	41	63.41
Mexico Equity Funds	47	91.49
<b>5-YEAR</b>		
Brazil Equity Funds	377	50.13
Brazil Large-Cap Funds	87	73.56
Brazil Mid-/Small-Cap Funds	83	61.45
Brazil Corporate Bond Funds	174	28.74
Brazil Government Bond Funds	268	72.39
Chile Equity Funds	43	51.16
Mexico Equity Funds	44	88.64
<b>10-YEAR</b>		
Brazil Equity Funds	260	43.46
Brazil Large-Cap Funds	77	61.04
Brazil Mid-/Small-Cap Funds	45	53.33
Brazil Corporate Bond Funds	26	50.00
Brazil Government Bond Funds	169	72.78
Chile Equity Funds	41	41.46
Mexico Equity Funds	33	72.73

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 3: Average Fund Performance (Equal Weighted)</b>				
<b>CATEGORY</b>	<b>1-YEAR (%)</b>	<b>3-YEAR (ANNUALIZED %)</b>	<b>5-YEAR (ANNUALIZED %)</b>	<b>10-YEAR (ANNUALIZED %)</b>
S&P Brazil BMI	-2.04	17.05	13.86	8.07
Brazil Equity Funds	1.73	16.07	12.38	6.77
S&P Brazil LargeCap	-6.92	13.80	11.15	6.52
Brazil Large-Cap Funds	-2.64	15.81	12.51	5.95
S&P Brazil MidSmallCap	8.71	24.19	20.01	11.46
Brazil Mid-/Small-Cap Funds	16.53	21.24	16.30	8.83
Anbima Debentures Index (IDA)	1.76	7.24	10.15	10.81
Brazil Corporate Bond Funds	2.16	2.37	6.51	9.05
Anbima Market Index (IMA)	6.52	10.22	12.12	11.57
Brazil Government Bond Funds	3.57	7.22	9.14	9.35
S&P Chile BMI	-21.69	-5.81	0.69	0.55
Chile Equity Funds	-21.67	-5.67	-0.22	-1.13
S&P/BMV IRT	-10.87	-6.75	-1.30	3.89
Mexico Equity Funds	-12.13	-7.47	-2.50	2.85

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Index performance based on total return in local country currency. Funds are equal weighted, but indices are not. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

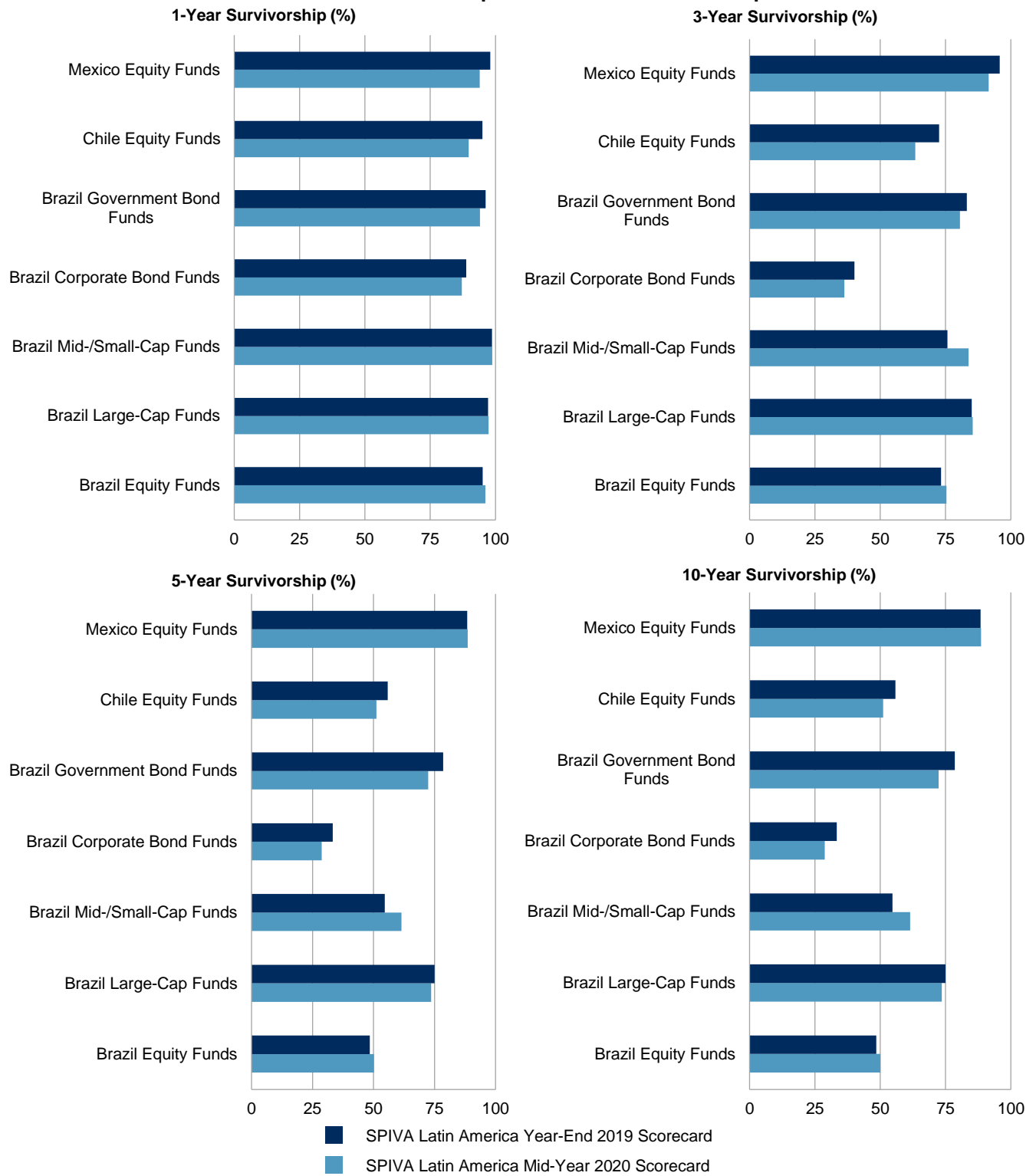
<b>Report 4: Average Fund Performance (Asset Weighted)</b>				
<b>CATEGORY</b>	<b>1-YEAR (%)</b>	<b>3-YEAR (ANNUALIZED %)</b>	<b>5-YEAR (ANNUALIZED %)</b>	<b>10-YEAR (ANNUALIZED %)</b>
S&P Brazil BMI	-2.04	17.05	13.86	8.07
Brazil Equity Funds	-1.70	15.87	13.51	8.23
S&P Brazil LargeCap	-6.92	13.80	11.15	6.52
Brazil Large-Cap Funds	-3.10	16.87	13.52	6.48
S&P Brazil MidSmallCap	8.71	24.19	20.01	11.46
Brazil Mid-/Small-Cap Funds	4.40	16.92	14.35	9.25
Anbima Debentures Index (IDA)	1.76	7.24	10.15	10.81
Brazil Corporate Bond Funds	2.10	5.76	8.52	9.60
Anbima Market Index (IMA)	6.52	10.22	12.12	11.57
Brazil Government Bond Funds	4.35	6.24	8.80	9.19
S&P Chile BMI	-21.69	-5.81	0.69	0.55
Chile Equity Funds	-22.41	-6.63	-1.07	-2.38
S&P/BMV IRT	-10.87	-6.75	-1.30	3.89
Mexico Equity Funds	-13.33	-7.99	-2.85	2.99

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Index performance based on total return in local country currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 5: Quartile Breakpoints of Funds</b>			
<b>FUND CATEGORY</b>	<b>THIRD QUARTILE</b>	<b>SECOND QUARTILE</b>	<b>FIRST QUARTILE</b>
<b>1-YEAR</b>			
Brazil Equity Funds	-5.86	0.81	7.46
Brazil Large-Cap Funds	-7.91	-5.93	-1.05
Brazil Mid-/Small-Cap Funds	2.01	5.88	16.07
Brazil Corporate Bond Funds	0.07	2.52	5.76
Brazil Government Bond Funds	3.10	4.27	5.79
Chile Equity Funds	-24.22	-21.93	-20.39
Mexico Equity Funds	-14.54	-12.29	-9.91
<b>3-YEAR</b>			
Brazil Equity Funds	12.98	15.72	19.49
Brazil Large-Cap Funds	13.14	15.30	17.10
Brazil Mid-/Small-Cap Funds	15.52	17.90	21.77
Brazil Corporate Bond Funds	5.20	6.14	7.78
Brazil Government Bond Funds	5.14	6.04	10.67
Chile Equity Funds	-8.50	-7.50	-5.55
Mexico Equity Funds	-9.48	-7.46	-5.79
<b>5-YEAR</b>			
Brazil Equity Funds	9.83	12.64	16.41
Brazil Large-Cap Funds	10.22	12.33	14.24
Brazil Mid-/Small-Cap Funds	13.05	17.01	19.72
Brazil Corporate Bond Funds	8.47	9.05	10.58
Brazil Government Bond Funds	8.24	9.04	12.33
Chile Equity Funds	-3.02	-2.03	-0.82
Mexico Equity Funds	-4.59	-3.23	-1.31
<b>10-YEAR</b>			
Brazil Equity Funds	3.64	6.20	9.99
Brazil Large-Cap Funds	3.23	5.04	6.85
Brazil Mid-/Small-Cap Funds	5.46	8.42	11.06
Brazil Corporate Bond Funds	9.69	9.83	10.01
Brazil Government Bond Funds	8.37	9.36	10.94
Chile Equity Funds	-2.88	-1.79	-1.52
Mexico Equity Funds	0.58	2.20	3.73

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Index performance based on total return in local country currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

**Exhibit 1: Year-End 2019 and Mid-Year 2020 Comparison of Fund Survivorship**



Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Charts are provided for illustrative purposes.

## APPENDIX A

### SPIVA Styles and Morningstar Fund Classifications

Data are obtained from Morningstar for all managed funds for which month-end data are available during the performance period. The SPIVA Latin America Scorecard covers country-specific funds for Brazil, Chile, and Mexico that are domiciled in the respective country markets and denominated in each country's local currency. The Morningstar classification system produces narrow, style-based classifications for funds. Where appropriate, S&P Dow Jones Indices consolidates the style-based categories in order to generate a larger sample size and develop a broad-market comparison to market-based benchmarks.

Morningstar categories have been mapped to SPIVA peer groups as follows:

<b>Exhibit 2: Fund Category Mapping</b>	
<b>MORNINGSTAR CATEGORY</b>	<b>SPIVA CATEGORY</b>
<b>BRAZIL</b>	
Brazil Fund Brazil All-Cap Equity	Brazil Equity Funds
Brazil Fund Brazil Large-Cap Equity	Brazil Large-Cap Funds
Brazil Fund Brazil Small-/Mid-Cap Equity	Brazil Mid-/Small-Cap Funds
Brazil Fund BRL Corporate Bond	Brazil Corporate Bond Funds
Brazil Fund BRL Government Bond	Brazil Government Bond Funds
<b>CHILE</b>	
Chile Fund Chile Equity	Chile Equity Funds
<b>MEXICO</b>	
Mexico Fund Mexico Equity	Mexico Equity Funds

Source: S&P Dow Jones Indices LLC, Morningstar. Table is provided for illustrative purposes only.

## APPENDIX B

### Glossary – Reports

#### PERCENTAGE OF FUNDS OUTPERFORMED BY THE INDEX

We use funds with returns available for the entire period as the denominator. We determine the count of funds that have survived and beat the index and then report the index outperformance percentage.

#### SURVIVORSHIP (%)

The survivorship metric represents the percentage of funds in existence at the beginning of the time period that are still active at the end of the time period.

#### EQUAL-WEIGHTED FUND PERFORMANCE

Equal-weighted returns for a particular style category are determined by calculating a simple average return of all active funds in that category in a particular month.



## ASSET-WEIGHTED FUND PERFORMANCE

Asset-weighted returns for a particular style category are determined by calculating a weighted average return of all funds in that category in a particular month, with each fund's return weighted by its total net assets. Asset-weighted returns are a better indicator of fund category performance because they reflect the returns of the total money invested in that particular style category with more accuracy.

## QUARTILE BREAKPOINTS

The  $p^{\text{th}}$  percentile for a set of data is the value that is greater than or equal to  $p\%$  of the data but is less than or equal to  $(100-p)\%$  of the data. In other words, it is a value that divides the data into two parts: the lower  $p\%$  of the values and the upper  $(100-p)\%$  of the values. The first quartile border is the 75<sup>th</sup> percentile, which is the value separating the elements of a population into the lower 75% and the upper 25%. The second quartile border is the 50<sup>th</sup> percentile, and the third quartile border is the 25<sup>th</sup> percentile. For fund category quartiles in a particular time period, the data used are the return of the largest share class of the fund net of fees, excluding loads.

## SURVIVORSHIP BIAS

Some funds liquidate or merge during a period of study. This usually occurs due to continued poor performance by the fund. Therefore, if index returns were compared to fund returns using only surviving funds, the comparison would be biased in favor of the fund category. The SPIVA reports remove this bias in three ways. The first method to remove the bias is to use the entire investment opportunity set, made up of all funds in that particular category at the outset of the period, as the denominator for outperformance calculations. The second is to show explicitly the survivorship rate in each category. The final way is to construct a peer average return series for each category based on all available funds at the outset of the period.

## FEES

The fund returns used are net of fees, excluding loads.

## Indices

A benchmark index provides an investment reference against which fund performance can be measured.

### S&P BRAZIL BMI

The S&P Brazil BMI, a subset of the [S&P Global BMI](#), is designed to represent the Brazilian stock market.

### S&P BRAZIL LARGE CAP

The S&P Brazil LargeCap, a subset of the S&P Global BMI, is designed to represent large-cap stocks in the Brazilian market.

### S&P BRAZIL MIDSMALLCAP

The S&P Brazil MidSmallCap, a subset of the S&P Global BMI, is designed to represent mid- and small-cap stocks in the Brazilian market.

### S&P CHILE BMI

The S&P Chile BMI, a subset of the S&P Global BMI, is designed to represent the Chilean stock market.

### S&P/BMV IRT

The S&P/BMV IRT, the total return version of [S&P/BMV IPC](#), measures the performance of the largest and most liquid stocks listed on the Bolsa Mexicana de Valores.

### ANBIMA DEBENTURES INDEX (IDA)

The Anbima Debentures Index (IDA) represents a portfolio of debentures at market prices and serves as a benchmark for the segment. The index consists of all debentures priced by the Association.

### ANBIMA MARKET INDEX (IMA)

The Anbima Market Index (IMA) represents a portfolio of government securities at market prices, with an approximate range of 97% of the market segment.

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