

SPIVA[®] Latin America Scorecard

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Experience the
active vs. passive debate
on a global scale.

Summary

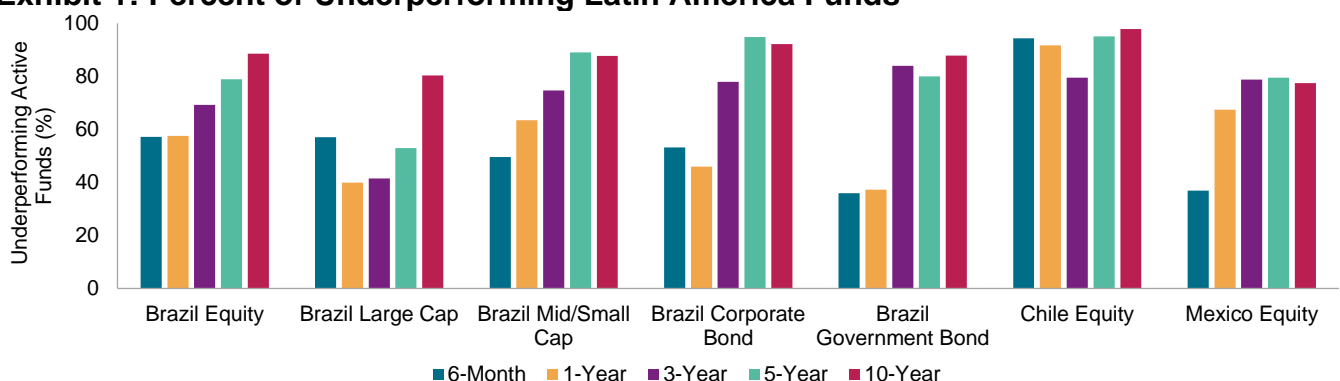
The SPIVA Latin America Scorecard measures the performance of actively managed funds across Brazil, Chile and Mexico against their respective benchmarks over various time horizons, providing statistics on outperformance rates, survivorship rates and fund performance dispersion.

Since the first publication of the S&P Indices Versus Active Funds (SPIVA) U.S. Scorecard in 2002, S&P Dow Jones Indices has been the de facto scorekeeper of the ongoing active versus passive debate.

Mid-Year 2022 Highlights

In the first half of 2022, performance among Latin American active managers was greatly mixed across countries. Mexico was a rare bright spot, with less than 50% of managers underperforming the S&P/BMV IRT. The majority of active managers in Brazil and Chile failed to outperform over longer periods.

Exhibit 1: Percent of Underperforming Latin America Funds



Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. 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. Chart is provided for illustrative purposes.

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Mexico

- The [S&P/BMV IRT](#) lost 9.3% over the first half of 2022, and 63% of active managers outperformed the S&P/BMV IRT over that period.
- Fewer funds were able to maintain their record of outperformance over the five-year period, with 80% of the funds underperforming their benchmark.
- Coupled with the outperformance of most active managers in the first half of the year, the survival rates of active funds in Mexico were among the highest in Latin America, at 100%, 94%, 91% and 78% over the 1-, 3-, 5-, and 10-year periods, respectively.

Brazil

- The [S&P Brazil BMI](#) fell by 8.94% YTD, and 57% of Brazil Large-Cap funds underperformed the index. Their long-term record was even worse, with 80% of funds underperforming over a 10-year period.
- Large-cap companies only declined by 6.15% YTD, as measured by the S&P Brazil LargeCap. Funds in this category lost 8.14% and 7.34% on equal- and asset-weighted bases, respectively, over the same period.

Chile

- Chilean equities were a bright spot, with the [S&P Chile BMI](#) up 20.46% YTD. However, 94% of Chile Equity funds underperformed the index over the same period, and 98% of Chilean Equity funds underperformed over 10 years.
- Larger funds performed relatively better than smaller funds over one and three years periods on average, while smaller funds outperformed over five and ten-year periods.

Fixed Income

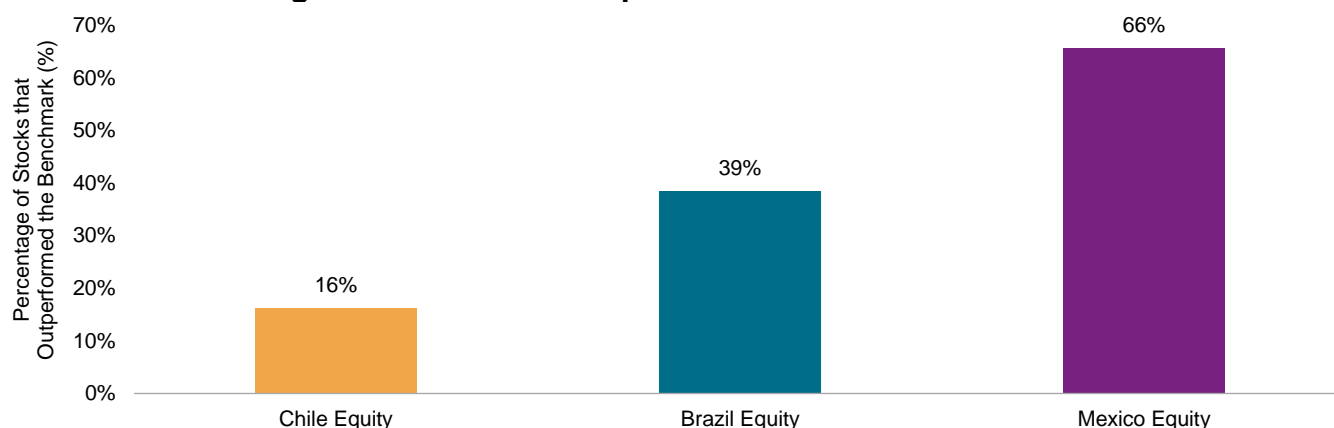
- Meanwhile, 64% of Brazil Government Bond funds outperformed their benchmark over a six-month period. Consistent with their equity peers, rates of underperformance increased over longer periods.
- Brazil Corporate Bond funds fared slightly worse, with 53% underperforming their benchmark over a six-month period.

Market Context

In contrast to their stellar first quarter, Latin American equities plummeted in Q2, with the [S&P Latin America BMI](#) down 3.46% in U.S. dollars YTD.¹ Although most regions posted losses, Chile managed to emerge unscathed with YTD gains. The outperformance of large caps in Chile set the bar higher for Chilean active managers, with the majority underperforming the benchmark, perhaps due to a lower weight in the largest names.²

Picking outperforming stocks was easier in some markets than others. Only 16% of stocks within the S&P Chile BMI beat the index. In Brazil, large caps did relatively well, and only 39% of stocks outperformed the S&P Brazil BMI. In Mexico, where a majority of funds outperformed, we observed the exact opposite: two-thirds of benchmark constituents outperformed the S&P/BMV IRT.

Exhibit 2: Percentage of Stocks That Outperformed the Index YTD



Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2022. Index performance based on total return in local country currency. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

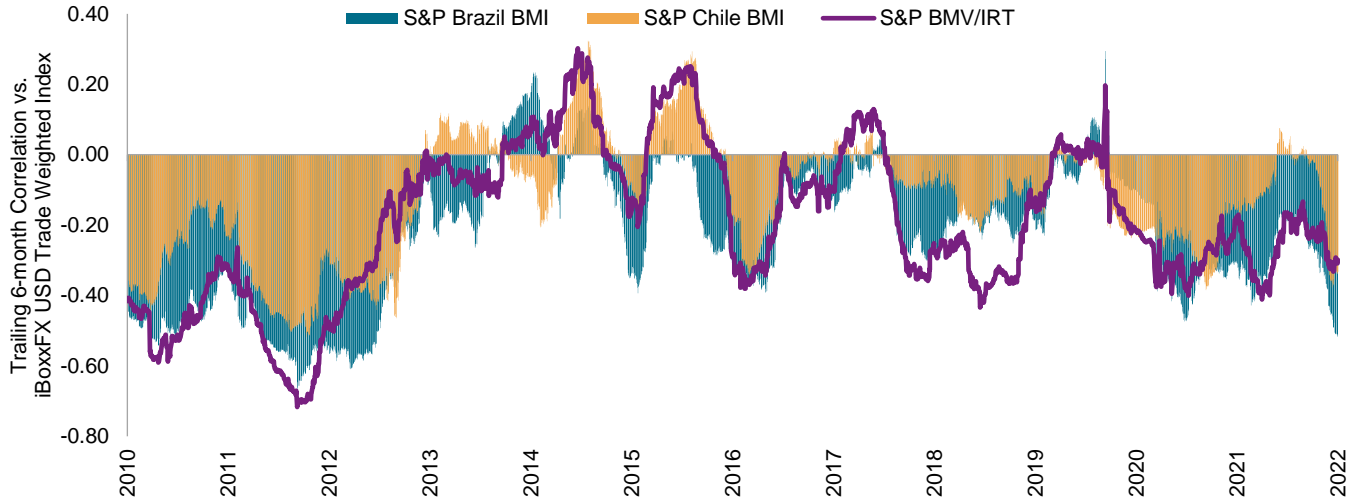
The macro environment across Latin America was characterized by concerns about U.S. inflation as well as hawkish sentiment from the Fed. Regionally, signs of stagflation in Mexico and Chile, concerns in Mexico around President Obrador's nationalistic policies, tumult surrounding Chile's rejection of a new constitution and the upcoming presidential election in Brazil added to market uncertainty. Another headwind was the strong rise in the U.S. dollar, with the iBoxxFX USD Trade Weighted Index up 8% YTD, driven by factors including relatively robust U.S. economic fundamentals, rate hikes by the Fed, as well as demand from investors globally seeking safe haven assets. Latin American equity markets, in particular Brazil, have

¹ For more information on June 2022 Latin America index performance, please see the dashboard: <https://www.spglobal.com/spdji/en/documents/performance-reports/dashboard-latin-america-2022-06.pdf>.

² Ganti, Anu, "Mutual Fund Portfolio: Equal Weight or Cap Weight?", Indexology® Blog, July 2017, <https://www.indexologyblog.com/2017/07/27/mutual-fund-portfolios-equal-weight-or-cap-weight/>.

historically tended to have a negative correlation versus the U.S. dollar (see Exhibit 3). The negative correlation deepened this year, reaching levels last seen in 2012.

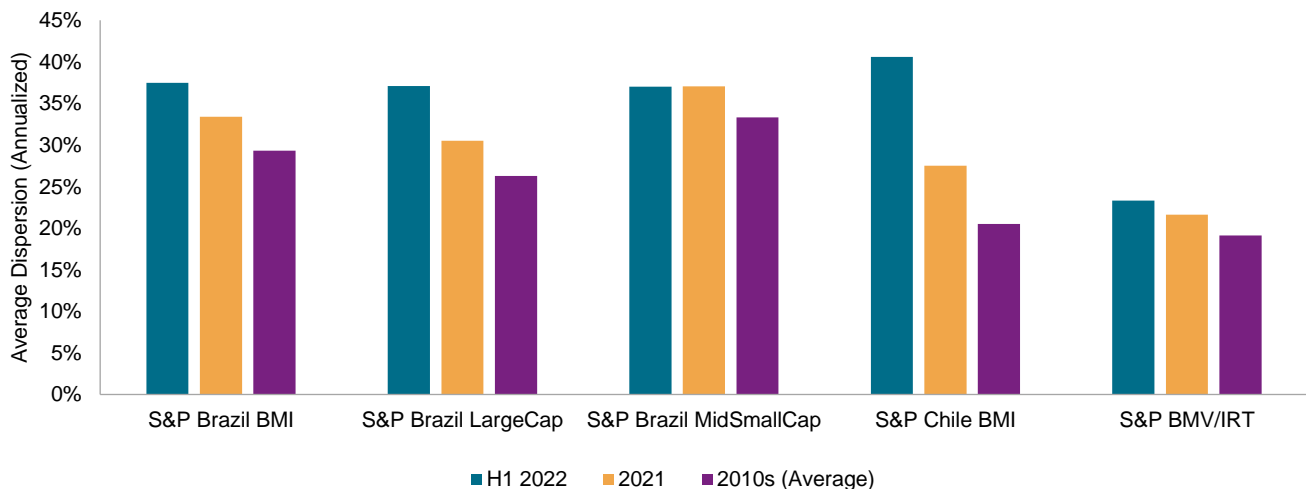
Exhibit 3: Correlations across Countries versus U.S. Dollar



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2022. Index performance based on total return in local country currency. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Given the tumultuous macroeconomic backdrop, Latin American equities unsurprisingly experienced heightened volatility, as evidenced by the [S&P/BMV IPC VIX](#)'s rise. A key accompaniment of this increase in volatility was elevated dispersion, or cross-sectional volatility, particularly among Chilean equities, as shown in Exhibit 4. In the first six months of 2022, monthly dispersion in the S&P Chile BMI averaged 41%, which was 13% and 20% higher than the 2021 and 2010-2019 averages, respectively. Meanwhile, the S&P Brazil LargeCap and S&P Brazil MidSmallCap dispersions averaged higher than their 2010-2019 averages as well.

Exhibit 4: Benchmark Dispersion across Categories



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2022. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

A Unique Scorecard for the Active versus Passive Debate

Since its first publication 20 years ago, the SPIVA Scorecard has served as the de facto scorekeeper of the active versus passive debate. For two decades, we have heard passionate arguments from believers in both camps when headline numbers have deviated from their beliefs.

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

- **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.
- **Apples-to-Apples Comparison:** Fund returns are often compared with a popular benchmark regardless of their investment category. The SPIVA Latin America Scorecard makes an appropriate comparison by measuring a fund's returns against the returns of a benchmark that reflects the fund's investment category.
- **Asset-Weighted Returns:** Average returns for a fund group are often calculated using only equal weighting, which means the returns of a BRL, CLP or MXN 10 billion fund affect the average in the same manner as the returns of an BRL, CLP or MXN 10 million fund. An accurate representation of how market participants fared in a particular period can be ascertained by calculating weighted average returns where 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 greater assets. Index, leveraged and inverse funds, along with other index-linked products, are excluded because this is meant to be a scorecard for active managers.

Reports

Report 1a: Percentage of Funds Outperformed by the Index (Based on Absolute Return)

Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
Brazil Equity Funds	S&P Brazil BMI	57.19	57.54	69.20	78.86	88.49
Brazil Large-Cap Funds	S&P Brazil LargeCap	57.05	39.86	41.51	52.94	80.39
Brazil Mid-/Small-Cap Funds	S&P Brazil MidSmallCap	49.61	63.48	74.67	89.06	87.65
Brazil Corporate Bond Funds	Anbima Debentures Index (IDA)	53.15	45.95	77.98	94.82	92.19
Brazil Government Bond Funds	Anbima Market Index (IMA)	35.90	37.31	83.93	79.93	87.78
Chile Equity Funds	S&P Chile BMI	94.29	91.67	79.49	95.12	97.83
Mexico Equity Funds	S&P/BMV IRT	36.96	67.39	78.72	79.55	77.50

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. 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.

Report 1b: Percentage of Funds Outperformed by the Index (Based on Risk-Adjusted Return)

Fund Category	Comparison Index	3-Year (%)	5-Year (%)	10-Year (%)
Brazil Equity Funds	S&P Brazil BMI	-	78.86	87.95
Brazil Large-Cap Funds	S&P Brazil LargeCap	-	54.12	74.51
Brazil Mid-/Small-Cap Funds	S&P Brazil MidSmallCap	76.00	89.06	87.65
Brazil Corporate Bond Funds	Anbima Debentures Index (IDA)	51.38	82.90	71.88
Brazil Government Bond Funds	Anbima Market Index (IMA)	43.93	53.17	58.82
Chile Equity Funds	S&P Chile BMI	79.49	95.12	97.83
Mexico Equity Funds	S&P/BMV IRT	78.72	79.55	80.00

Source S&P Dow Jones Indices LLC, Morningstar. Results shown for all time horizons over which the comparison index total return was positive. Data for periods ending June 30, 2022. Risk-adjusted return is computed as the annualized average monthly return divided by the annualized standard deviation of the monthly return for the measured periods. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Survivorship of Funds

Fund Category	Number of Funds at Start	Survivorship (%)
YTD		
Brazil Equity Funds	334	98.20
Brazil Large-Cap Funds	149	94.63
Brazil Mid-/Small-Cap Funds	129	96.90
Brazil Corporate Bond Funds	111	98.20
Brazil Government Bond Funds	351	98.86
Chile Equity Funds	35	94.29
Mexico Equity Funds	46	100.00
1-Year		
Brazil Equity Funds	325	96.00
Brazil Large-Cap Funds	143	93.01
Brazil Mid-/Small-Cap Funds	115	96.52
Brazil Corporate Bond Funds	111	93.69
Brazil Government Bond Funds	335	96.12
Chile Equity Funds	36	91.67
Mexico Equity Funds	46	100.00
3-Year		
Brazil Equity Funds	237	89.87
Brazil Large-Cap Funds	106	86.79
Brazil Mid-/Small-Cap Funds	75	86.67
Brazil Corporate Bond Funds	109	70.64
Brazil Government Bond Funds	280	84.29
Chile Equity Funds	39	71.79
Mexico Equity Funds	47	93.62
5-Year		
Brazil Equity Funds	246	69.92
Brazil Large-Cap Funds	85	78.82
Brazil Mid-/Small-Cap Funds	64	71.88
Brazil Corporate Bond Funds	193	26.94
Brazil Government Bond Funds	284	74.30
Chile Equity Funds	41	48.78
Mexico Equity Funds	44	90.91

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Survivorship of Funds (cont.)

Fund Category	Number of Funds at Start	Survivorship (%)
10-Year		
Brazil Equity Funds	365	33.15
Brazil Large-Cap Funds	102	54.90
Brazil Mid-/Small-Cap Funds	81	40.74
Brazil Corporate Bond Funds	64	31.25
Brazil Government Bond Funds	221	63.80
Chile Equity Funds	46	32.61
Mexico Equity Funds	40	77.50

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 3: Average Fund Performance (Equal-Weighted)

Index/Fund Category	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
S&P Brazil BMI	-8.94	-27.39	-1.23	9.54	7.37
Brazil Equity Funds	-10.53	-29.10	-2.46	7.37	5.13
S&P Brazil LargeCap	-6.15	-26.06	-2.54	7.95	6.65
Brazil Large-Cap Funds	-8.14	-25.06	-2.15	8.24	5.72
S&P Brazil MidSmallCap	-14.51	-30.18	1.24	12.83	8.87
Brazil Mid-/Small-Cap Funds	-15.42	-31.85	3.13	11.24	6.70
Anbima Debentures Index (IDA)	6.25	10.31	7.03	8.24	10.12
Brazil Corporate Bond Funds	5.46	8.00	5.61	4.09	7.61
Anbima Market Index (IMA)	4.49	5.34	5.13	7.87	9.44
Brazil Government Bond Funds	3.83	5.75	3.65	5.69	7.65
S&P Chile BMI	20.46	19.96	0.91	1.86	2.16
Chile Equity Funds	13.24	10.14	-2.21	0.04	0.25
S&P/BMV IRT	-9.27	-2.26	6.04	1.64	3.92
Mexico Equity Funds	-8.37	-3.57	2.02	-0.80	2.73

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. Returns shown are annualized for periods greater than one year. 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.

Report 4: Average Fund Performance (Asset-Weighted)

Index/Fund Category	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
S&P Brazil BMI	-8.94	-27.39	-1.23	9.54	7.37
Brazil Equity Funds	-12.52	-31.80	-4.24	6.26	5.73
S&P Brazil LargeCap	-6.15	-26.06	-2.54	7.95	6.65
Brazil Large-Cap Funds	-7.34	-25.85	-2.51	8.64	6.31
S&P Brazil MidSmallCap	-14.51	-30.18	1.24	12.83	8.87
Brazil Mid-/Small-Cap Funds	-14.46	-30.94	-0.52	8.53	6.79
Anbima Debentures Index (IDA)	6.25	10.31	7.03	8.24	10.12
Brazil Corporate Bond Funds	6.08	9.92	5.82	6.44	8.59
Anbima Market Index (IMA)	4.49	5.34	5.13	7.87	9.44
Brazil Government Bond Funds	5.21	7.56	4.66	5.64	7.88
S&P Chile BMI	20.46	19.96	0.91	1.86	2.16
Chile Equity Funds	14.14	13.00	-1.72	-0.09	-0.34
S&P/BMV IRT	-9.27	-2.26	6.04	1.64	3.92
Mexico Equity Funds	-5.48	0.78	1.93	-0.99	2.89

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. Returns shown are annualized for periods greater than one year. Index performance based on total return in local country currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 5: Quartile Breakpoints of Fund Performance

Fund Category	Third Quartile	Second Quartile	First Quartile
YTD			
Brazil Equity Funds	-14.82	-10.21	-5.33
Brazil Large-Cap Funds	-10.21	-6.31	-4.59
Brazil Mid-/Small-Cap Funds	-20.65	-14.34	-7.58
Brazil Corporate Bond Funds	5.94	6.24	6.69
Brazil Government Bond Funds	3.77	5.10	5.57
Chile Equity Funds	9.65	13.53	16.98
Mexico Equity Funds	-10.46	-8.60	-6.24
1-Year			
Brazil Equity Funds	-34.09	-29.20	-22.59
Brazil Large-Cap Funds	-28.02	-23.68	-20.88
Brazil Mid-/Small-Cap Funds	-39.56	-32.72	-21.29
Brazil Corporate Bond Funds	9.88	10.56	11.67
Brazil Government Bond Funds	2.42	7.83	8.88
Chile Equity Funds	4.43	11.05	15.08
Mexico Equity Funds	-6.20	-3.88	-1.24

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. Returns shown are annualized for periods greater than one year. Index performance based on total return in local country currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 5: Quartile Breakpoints of Fund Performance (cont.)

Fund Category	Third Quartile	Second Quartile	First Quartile
3-Year			
Brazil Equity Funds	-4.77	-3.03	0.63
Brazil Large-Cap Funds	-3.33	-1.60	0.26
Brazil Mid-/Small-Cap Funds	-4.75	-1.01	1.88
Brazil Corporate Bond Funds	5.37	6.05	7.37
Brazil Government Bond Funds	3.55	4.55	5.00
Chile Equity Funds	-2.93	-0.57	1.22
Mexico Equity Funds	-2.87	2.61	5.71
5-Year			
Brazil Equity Funds	5.80	7.95	10.11
Brazil Large-Cap Funds	7.21	8.24	10.23
Brazil Mid-/Small-Cap Funds	5.49	6.77	9.92
Brazil Corporate Bond Funds	6.16	6.67	7.88
Brazil Government Bond Funds	5.06	5.68	8.14
Chile Equity Funds	-1.52	-0.02	1.34
Mexico Equity Funds	-3.21	-0.42	1.53
10-Year			
Brazil Equity Funds	3.74	6.00	8.31
Brazil Large-Cap Funds	4.60	6.17	7.78
Brazil Mid-/Small-Cap Funds	4.30	6.35	9.79
Brazil Corporate Bond Funds	8.90	9.17	9.85
Brazil Government Bond Funds	7.37	8.20	8.76
Chile Equity Funds	-1.30	-0.39	1.00
Mexico Equity Funds	0.79	2.03	4.17

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. Returns shown are annualized for periods greater than one year. Index performance based on total return in local country currency. Past performance is no guarantee of future results. Table is 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.

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

Exhibit 1: Fund Category Mapping

Morningstar Category	SPIVA Category
Brazil	
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
Chile	
Chile Fund Chile Equity	Chile Equity Funds
Mexico	
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^{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 75th 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 50th percentile, and the third quartile border is the 25th 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 LargeCap

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 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 IMA represents a portfolio of government securities at market prices, with an approximate range of 97% of the market segment.

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