

Persistence Scorecard: Latin America

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INTRODUCTION

- A key dimension of any active versus passive debate is managers' ability to consistently deliver above-average returns over multiple periods. Persistence in performance is one way to differentiate skill from luck.
- In this report, we measure the performance persistence of active funds in Brazil, Chile, and Mexico that outperformed their peers over consecutive three- and five-year periods. We also analyze how their performance ranking transitioned over subsequent periods.

SUMMARY OF RESULTS

Brazil

- Exhibit 2 highlights the inability of top-performing equity fund managers to consistently replicate their success in subsequent years—regardless of size focus, by the fourth year, no fund remained in the top quartile.
- Within fixed income, results in the government bond funds category were similar. However, the corporate bond funds category painted a slightly different picture; while the majority of managers were not able to maintain consistent outperformance for five years in a row, a noticeable 28% them were able to do so.
- The five-year transition matrix (see Exhibit 5) highlights that top-quartile equity (30%), large-cap equity (38%), and government bond (70%) funds that remained active had a higher likelihood of remaining in the top quartile in the second five-year period.
- Mid- and small-cap equity funds had a high frequency of closures—even for equity funds in the top quartile in the first five-year period, 30% were eventually merged or liquidated in the second five-year period. Thus, overall, a fund had a higher chance of shutting down than of remaining in the top quartile.

- Top-quartile fund managers focused on corporate bond funds fared particularly poorly, as no manager remained in the top quartile in the second five-year period—most funds shut down (80%) and some others (20%) moved to second quartile.

Chile

- A minority of Chilean high-performing equity funds (10%) stayed in the top quartile for three consecutive years (see Exhibit 1).
- Exhibit 2 demonstrates the lack of persistence by equity managers in Chile—just 9% of top-performing funds in the first 12-month period repeated their outperformance in the second period. None of them persisted in the subsequent periods.
- The five-year transition matrix shows top-quartile managers in the first period that remained live in the second period were more likely to stay in the first quartile or to move to quartile two. However, a significant percentage of funds eventually shut down in the second period, especially the ones in the second and third quartile (50% and 60% respectively).

Mexico

- No funds in the Mexican equity category managed to stay in the top quartile for three consecutive years (see Exhibit 1).
- The five-year performance persistence test (see Exhibit 2) shows that top-quartile managers had difficulty replicating their outperformance in future years. After one year, just 20% of managers remained in the top quartile, and by year two, that percentage dropped to 10%.
- Exhibit 5 shows that top-quartile managers in the first five-year period were resilient and survived in the second five-year period, regardless of the quartile they ended in.
- As observed in the [SPIVA® Latin America Year-End 2019 Scorecard](#), Mexico had a higher rate of survivorship than Brazil and Chile in the five-year period.

ABOUT THE PERSISTENCE SCORECARD

The phrase “past performance is not an indicator of future results” (or some variation thereof) can be found in the fine print of most mutual fund literature. Yet, due to either force of habit or conviction, investors and advisors consider past performance and related metrics to be important factors in fund selection. So does past performance really matter?

To answer this question, this scorecard tracks the consistency of top performers over yearly consecutive periods and measures performance persistence through transition matrices. Key features of the scorecard include the following.

- **Same Universe as SPIVA:** The scorecard follows the fund categories defined in the [SPIVA Latin America Scorecard](#), a semiannual report that tracks the number of active funds in Brazil, Chile, and Mexico that beat their respective benchmarks over different time horizons.
- **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, S&P Persistence Scorecards account for the entire opportunity set, not just the survivors, thereby eliminating survivorship bias.
- **Data Cleaning:** The S&P Persistence 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.
- **Tracking Reports of Top Performers:** The tracking reports show the percentages of funds that remain in the top quartile or top half rankings over consecutive three- and five-year periods.
- **Transition Matrices:** Transition matrices show the movements between quartiles and halves over two non-overlapping, three- and five-year periods. They also track the percentage of funds that have merged or liquidated.

EXHIBITS

Exhibit 1: Performance Persistence of Funds over Three Consecutive 12-Month Periods			
FUND CATEGORY	FUND COUNT AT START (DECEMBER 2017)	PERCENTAGE REMAINING IN TOP QUARTILE	
		DECEMBER 2018	DECEMBER 2019
TOP QUARTILE			
Brazil Equity Funds	61	33	7
Brazil Large-Cap Funds	21	33	10
Brazil Mid-/Small-Cap Funds	15	40	27
Brazil Corporate Bond Funds	41	46	32
Brazil Government Bond Funds	83	63	48
Chile Equity Funds	10	50	10
Mexico Equity Funds	12	8	0
FUND CATEGORY	FUND COUNT AT START (DECEMBER 2017)	PERCENTAGE REMAINING IN TOP HALF	
		DECEMBER 2018	DECEMBER 2019
TOP HALF			
Brazil Equity Funds	122	52	26
Brazil Large-Cap Funds	41	56	44
Brazil Mid-/Small-Cap Funds	30	57	33
Brazil Corporate Bond Funds	77	48	35
Brazil Government Bond Funds	165	84	74
Chile Equity Funds	19	68	21
Mexico Equity Funds	23	35	22

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending Dec. 31, 2019. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Exhibit 2: Performance Persistence of Funds over Five Consecutive 12-Month Periods					
FUND CATEGORY	FUND COUNT AT START (DECEMBER 2015)	PERCENTAGE REMAINING IN TOP QUARTILE			
		DECEMBER 2016	DECEMBER 2017	DECEMBER 2018	DECEMBER 2019
TOP QUARTILE					
Brazil Equity Funds	85	5	0	0	0
Brazil Large-Cap Funds	19	5	0	0	0
Brazil Mid-/Small-Cap Funds	19	11	5	0	0
Brazil Corporate Bond Funds	29	59	34	34	28
Brazil Government Bond Funds	73	0	0	0	0
Chile Equity Funds	11	9	0	0	0
Mexico Equity Funds	10	20	10	0	0
FUND CATEGORY	FUND COUNT AT START (DECEMBER 2015)	PERCENTAGE REMAINING IN TOP HALF			
		DECEMBER 2016	DECEMBER 2017	DECEMBER 2018	DECEMBER 2019
TOP HALF					
Brazil Equity Funds	169	32	20	14	8
Brazil Large-Cap Funds	38	39	32	11	8
Brazil Mid-/Small-Cap Funds	37	46	11	5	3
Brazil Corporate Bond Funds	74	70	31	16	15
Brazil Government Bond Funds	145	37	29	25	23
Chile Equity Funds	21	38	19	10	0
Mexico Equity Funds	20	60	30	15	10

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending Dec. 31, 2019. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Exhibit 3: Three-Year Transition Matrix – Performance over Two Non-Overlapping Three-Year Periods (Based on Quartiles)							
QUARTILE	FUND COUNT AT START (DECEMBER 2016)	THREE-YEAR PERCENTAGE AT END					MERGED/ LIQUIDATED (%)
		1ST QUARTILE (%)	2ND QUARTILE (%)	3RD QUARTILE (%)	4TH QUARTILE (%)		
BRAZIL EQUITY FUNDS							
1st Quartile	63	28.57	15.87	3.17	14.29	38.10	
2nd Quartile	63	22.22	31.75	19.05	9.52	17.46	
3rd Quartile	63	9.52	12.70	33.33	20.63	23.81	
4th Quartile	64	12.50	12.50	17.19	29.69	28.13	
BRAZIL LARGE-CAP FUNDS							
1st Quartile	16	31.25	37.50	12.50	12.50	6.25	
2nd Quartile	15	13.33	6.67	33.33	20.00	26.67	
3rd Quartile	16	25.00	6.25	31.25	31.25	6.25	
4th Quartile	16	18.75	31.25	12.50	25.00	12.50	
BRAZIL MID-/SMALL-CAP FUNDS							
1st Quartile	14	14.29	14.29	21.43	42.86	7.14	
2nd Quartile	14	14.29	21.43	21.43	28.57	14.29	
3rd Quartile	14	21.43	35.71	21.43	0.00	21.43	
4th Quartile	15	26.67	6.67	13.33	13.33	40.00	
BRAZIL CORPORATE BOND FUNDS							
1st Quartile	14	71.43	14.29	0.00	7.14	7.14	
2nd Quartile	13	0.00	30.77	15.38	7.69	46.15	
3rd Quartile	13	0.00	0.00	53.85	15.38	30.77	
4th Quartile	14	0.00	21.43	0.00	42.86	35.71	
BRAZIL GOVERNMENT BOND FUNDS							
1st Quartile	60	70.00	16.67	0.00	3.33	10.00	
2nd Quartile	59	15.25	49.15	27.12	0.00	8.47	
3rd Quartile	60	1.67	21.67	60.00	6.67	10.00	
4th Quartile	60	1.67	0.00	1.67	78.33	18.33	
CHILE EQUITY FUNDS							
1st Quartile	10	40.00	10.00	10.00	30.00	10.00	
2nd Quartile	9	11.11	11.11	33.33	11.11	33.33	
3rd Quartile	10	10.00	10.00	20.00	10.00	50.00	
4th Quartile	10	10.00	30.00	0.00	20.00	40.00	
MEXICO EQUITY FUNDS							
1st Quartile	10	30.00	10.00	30.00	20.00	10.00	
2nd Quartile	10	10.00	40.00	30.00	10.00	10.00	
3rd Quartile	10	50.00	10.00	20.00	20.00	0.00	
4th Quartile	11	9.09	27.27	18.18	45.45	0.00	

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending Dec. 31, 2019. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Exhibit 4: Three-Year Transition Matrix – Performance over Two Non-Overlapping Three-Year Periods (Based on Halves)				
HALF	FUND COUNT AT START (DECEMBER 2016)	THREE-YEAR PERCENTAGE AT END		
		TOP HALF (%)	BOTTOM HALF (%)	MERGED/LIQUIDATED (%)
BRAZIL EQUITY FUNDS				
Top Half	126	49	23	28
Bottom Half	127	24	50	26
BRAZIL LARGE-CAP FUNDS				
Top Half	31	45	39	16
Bottom Half	32	41	50	9
BRAZIL MID-/SMALL-CAP FUNDS				
Top Half	28	32	57	11
Bottom Half	29	45	24	31
BRAZIL CORPORATE BOND FUNDS				
Top Half	27	59	15	26
Bottom Half	27	11	56	33
BRAZIL GOVERNMENT BOND FUNDS				
Top Half	119	76	15	9
Bottom Half	120	13	73	14
CHILE EQUITY FUNDS				
Top Half	19	37	42	21
Bottom Half	20	30	25	45
MEXICO EQUITY FUNDS				
Top Half	20	45	45	10
Bottom Half	21	48	52	0

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending Dec. 31, 2019. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Exhibit 5: Five-Year Transition Matrix – Performance over Two Non-Overlapping Five-Year Periods (Based on Quartiles)							
QUARTILE	FUND COUNT AT START (DECEMBER 2014)	FIVE-YEAR PERCENTAGE AT END					MERGED/ LIQUIDATED (%)
		1ST QUARTILE (%)	2ND QUARTILE (%)	3RD QUARTILE (%)	4TH QUARTILE (%)		
BRAZIL EQUITY FUNDS							
1st Quartile	46	30.43	15.22	6.52	19.57	28.26	
2nd Quartile	46	13.04	17.39	10.87	15.22	43.48	
3rd Quartile	46	13.04	13.04	17.39	13.04	43.48	
4th Quartile	47	4.26	14.89	25.53	14.89	40.43	
BRAZIL LARGE-CAP FUNDS							
1st Quartile	13	38.46	7.69	15.38	15.38	23.08	
2nd Quartile	13	38.46	15.38	38.46	7.69	0.00	
3rd Quartile	13	7.69	30.77	7.69	30.77	23.08	
4th Quartile	13	0.00	30.77	23.08	30.77	15.38	
BRAZIL MID-/SMALL-CAP FUNDS							
1st Quartile	10	20.00	20.00	20.00	10.00	30.00	
2nd Quartile	10	20.00	10.00	10.00	20.00	40.00	
3rd Quartile	10	10.00	30.00	0.00	10.00	50.00	
4th Quartile	10	10.00	0.00	30.00	20.00	40.00	
BRAZIL CORPORATE BOND FUNDS							
1st Quartile	5	0.00	20.00	0.00	0.00	80.00	
2nd Quartile	5	40.00	20.00	20.00	0.00	20.00	
3rd Quartile	5	20.00	20.00	40.00	0.00	20.00	
4th Quartile	6	0.00	0.00	0.00	50.00	50.00	
BRAZIL GOVERNMENT BOND FUNDS							
1st Quartile	40	70.00	15.00	0.00	0.00	15.00	
2nd Quartile	40	15.00	42.50	20.00	0.00	22.50	
3rd Quartile	40	2.50	22.50	65.00	5.00	5.00	
4th Quartile	41	0.00	4.88	0.00	80.49	14.63	
CHILE EQUITY FUNDS							
1st Quartile	9	22.22	33.33	0.00	11.11	33.33	
2nd Quartile	8	0.00	0.00	25.00	25.00	50.00	
3rd Quartile	8	12.50	0.00	25.00	0.00	62.50	
4th Quartile	9	22.22	11.11	11.11	22.22	33.33	
MEXICO EQUITY FUNDS							
1st Quartile	8	25.00	25.00	25.00	25.00	0.00	
2nd Quartile	7	0.00	28.57	28.57	28.57	14.29	
3rd Quartile	7	57.14	28.57	14.29	0.00	0.00	
4th Quartile	8	12.50	12.50	25.00	37.50	12.50	

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending Dec. 31, 2019. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Exhibit 6: Five-Year Transition Matrix – Performance over Two Non-Overlapping Five-Year Periods (Based on Halves)				
HALF	FUND COUNT AT START (DECEMBER 2014)	FIVE-YEAR PERCENTAGE AT END		
		TOP HALF (%)	BOTTOM HALF (%)	MERGED/LIQUIDATED (%)
BRAZIL EQUITY FUNDS				
Top Half	92	38	26	36
Bottom Half	93	23	35	42
BRAZIL LARGE-CAP FUNDS				
Top Half	26	50	38	12
Bottom Half	26	35	46	19
BRAZIL MID-/SMALL-CAP FUNDS				
Top Half	20	35	30	35
Bottom Half	20	25	30	45
BRAZIL CORPORATE BOND FUNDS				
Top Half	10	40	10	50
Bottom Half	11	18	45	36
BRAZIL GOVERNMENT BOND FUNDS				
Top Half	80	71	10	19
Bottom Half	81	15	75	10
CHILE EQUITY FUNDS				
Top Half	17	29	29	41
Bottom Half	17	24	29	47
MEXICO EQUITY FUNDS				
Top Half	15	40	53	7
Bottom Half	15	53	40	7

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending Dec. 31, 2019. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

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