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Persistence Scorecard: Latin America

INTRODUCTION

- When it comes to the active versus passive debate, one key dimension is the ability of a manager to deliver above-average returns over multiple periods. The ability to consistently outperform is one way to differentiate a manager's skill from pure 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 their performance ranking transition matrices over subsequent periods.

SUMMARY OF RESULTS

Brazil

- Exhibit 1 shows that top-performing equity fund managers in Brazil were mostly unable to replicate that performance in subsequent years. Just 2.56% of Brazil Equity Funds that were in the top quartile in June 2016 remained there in June 2018, with similar figures for the equity size categories (5.00% for Brazil Large-Cap Funds and 6.25% for Brazil Mid/Small-Cap Funds). Top-quartile Brazil Corporate Bond Funds managers generally did well after the one-year period, but only 30.00% remained in the top quartile after two years.
- Exhibit 2 extends the time horizon to five years, and we are able to see that for three of the five categories (Brazil Equity Funds, Brazil Mid-/Small-Cap Funds, and Brazil Government Bond Funds), no managers remained in the top quartile by June 2018.
- As seen in the three-year quartile transition matrix in Exhibit 3, the most common occurrence for all four quartiles of Brazil Equity Funds was for them to be merged or liquidated in the second three-year period. For Brazil Equity Funds in the first quartile, only 25.00% remained in the first quartile in the second three-year period. Top-performing managers investing in Brazil Large-Cap Funds and Brazil Mid-/Small-Cap Funds didn't fare much better than the broad equity managers, at 29.41% and 28.57%, respectively.

Chile

- Of the 10 top-performing Chilean funds in June 2016, five remained in the top quartile after one year, while just one fund remained in the top quartile after two years (see Exhibit 1).
- The three-year transition matrix in Exhibit 3 shows that 50.00% of the top quartile from the first three-year period ended up being placed in the first or second quartile for the second period. However, 40.00% of the funds from the top quartile were merged or liquidated in the second three-year period. For the second, third, and fourth quartiles, funds transitioned to other quartiles or were merged or liquidated with no apparent trends.

Mexico

- One-quarter (3 of 12) of top-performing Mexico Equity Funds remained in the top quartile after one year, dropping to 2 out of 12 funds after two years (see Exhibit 1). Over five consecutive one-year periods as shown in Exhibit 2, no funds remained in the top quartile by the end of the third year (June 2017). Looking at the top half of funds, 8.70% remained there after three years, dropping to 4.35% after four years.
- Just one fund remained in the top quartile in the second three-year period, with most funds (8 of 11) moving to quartiles 3 or 4 (see Exhibit 3). In general, funds from quartiles 2 and 3 moved up to quartile 1, while most funds from quartile 4 remained there or moved up to quartile 3.

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 <u>SPIVA Latin</u> <u>America Scorecard</u>, 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, The 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-year periods. They also track the percentage of funds that have merged or liquidated.

EXHIBITS

	FUND COUNT AT CTART	12-Month Periods PERCENTAGE REMAINING IN TOP QUARTILE		
FUND CATEGORY	FUND COUNT AT START (JUNE 2016)	JUNE 2017	JUNE 2018	
TOP QUARTILE	<u> </u>			
Brazil Equity Funds	78	17.95	2.56	
Brazil Large-Cap Funds	20	45.00	5.00	
Brazil Mid-/Small-Cap Funds	16	12.50	6.25	
Brazil Corporate Bond Funds	40	72.50	30.00	
Brazil Government Bond Funds	75	36.00	22.67	
Chile Equity Funds	10	50.00	10.00	
Mexico Equity Funds	12	25.00	16.67	
FUND CATEGORY	FUND COUNT AT START	PERCENTAGE REMAINING IN TOP HALF		
FUND CATEGORY	(JUNE 2016)	JUNE 2017	JUNE 2018	
TOP HALF				
Brazil Equity Funds	157	42.04	19.11	
Brazil Large-Cap Funds	39	66.67	43.59	
Brazil Mid-/Small-Cap Funds	33	36.36	21.21	
Brazil Corporate Bond Funds	81	80.25	19.75	
Brazil Government Bond Funds	150	63.33	49.33	
Chile Equity Funds	21	61.90	33.33	
Mexico Equity Funds 25		48.00	32.00	

Exhibit 2: Performance Persistence	ce of Funds Over Five Consecuti	ve 12-Month Peri	ods		
FUND CATEGORY	FUND COUNT AT START	PERCENTAGE REMAINING IN TOP QUARTILE			
FUND CATEGORY	(JUNE 2014)	JUNE 2015	JUNE 2016	JUNE 2017	JUNE 2018
TOP QUARTILE	<u>.</u>				
Brazil Equity Funds	92	33.70	15.22	2.17	0.00
Brazil Large-Cap Funds	19	36.84	26.32	21.05	10.53
Brazil Mid-/Small-Cap Funds	20	45.00	0.00	0.00	0.00
Brazil Corporate Bond Funds	19	31.58	21.05	21.05	21.05
Brazil Government Bond Funds	64	39.06	12.50	3.13	0.00
Chile Equity Funds	10	10.00	10.00	0.00	0.00
Mexico Equity Funds	12	16.67	8.33	0.00	0.00
FUND CATEGORY	FUND COUNT AT START	PERCENTAGE REMAINING IN TOP HALF			
FUND CATEGORY	(JUNE 2014)	JUNE 2015	JUNE 2016	JUNE 2017	JUNE 2018
TOP HALF	·		·		
Brazil Equity Funds	183	58.47	30.60	10.93	6.56
Brazil Large-Cap Funds	39	64.10	38.46	30.77	23.08
Brazil Mid-/Small-Cap Funds	40	67.50	37.50	17.50	7.50
Brazil Corporate Bond Funds	37	54.05	43.24	40.54	32.43
Brazil Government Bond Funds	127	61.42	26.77	11.81	9.45
Chile Equity Funds	21	14.29	9.52	0.00	0.00
Mexico Equity Funds	23	43.48	17.39	8.70	4.35

Exhibit 3: Three-Year Transition Matrix – Performance Over Two Non-Overlapping Three-Year Periods (Based on Quartile)					Quartile)		
	FUND COUNT	THREE-YEAR PERCENTAGE AT END					
QUARTILE	AT START (JUNE 2015)	1ST QUARTILE (%)	2ND QUARTILE (%)	3RD QUARTILE (%)	4TH QUARTILE (%)	MERGED/ LIQUIDATED (%)	
BRAZIL EQUITY	FUNDS						
1st Quartile	68	25.00	17.65	10.29	17.65	29.41	
2nd Quartile	67	14.93	14.93	11.94	22.39	35.82	
3rd Quartile	68	8.82	20.59	17.65	8.82	44.12	
4th Quartile	67	14.93	10.45	23.88	14.93	35.82	
BRAZIL LARGE-	-CAP FUNDS						
1st Quartile	17	29.41	23.53	11.76	11.76	23.53	
2nd Quartile	16	18.75	25.00	37.50	18.75	0.00	
3rd Quartile	17	29.41	17.65	11.76	23.53	17.65	
4th Quartile	16	6.25	18.75	18.75	31.25	25.00	
BRAZIL MID-/SN	IALL-CAP FUNDS						
1st Quartile	14	28.57	14.29	14.29	21.43	21.43	
2nd Quartile	15	13.33	26.67	20.00	13.33	26.67	
3rd Quartile	14	21.43	14.29	28.57	7.14	28.57	
4th Quartile	14	0.00	14.29	0.00	21.43	64.29	
BRAZIL CORPO	RATE BOND FUNDS						
1st Quartile	15	13.33	0.00	0.00	6.67	80.00	
2nd Quartile	16	43.75	12.50	18.75	6.25	18.75	
3rd Quartile	15	0.00	46.67	13.33	6.67	33.33	
4th Quartile	15	0.00	0.00	26.67	40.00	33.33	
BRAZIL GOVER	NMENT BOND FUND	s					
1st Quartile	54	27.78	33.33	20.37	5.56	12.96	
2nd Quartile	53	3.77	24.53	56.60	5.66	9.43	
3rd Quartile	54	29.63	5.56	5.56	44.44	14.81	
4th Quartile	53	26.42	22.64	5.66	30.19	15.09	
CHILE EQUITY F	FUNDS						
1st Quartile	10	30.00	20.00	0.00	10.00	40.00	
2nd Quartile	11	9.09	18.18	27.27	18.18	27.27	
3rd Quartile	10	10.00	10.00	10.00	30.00	40.00	
4th Quartile	10	20.00	20.00	30.00	10.00	20.00	
MEXICO EQUITY	/ FUNDS						
1st Quartile	11	9.09	18.18	36.36	36.36	0.00	
2nd Quartile	11	54.55	18.18	0.00	18.18	9.09	
3rd Quartile	10	30.00	40.00	0.00	10.00	20.00	
4th Quartile	11	0.00	18.18	45.45	27.27	9.09	

Exhibit 4: Three-Year Transition Matrix – Performance Over Two Non-Overlapping Three-Year Periods (Based on Halves)					
		THREE-YEAR PERCENTAGE AT END			
HALF	FUND COUNT AT START (JUNE 2015)	TOP HALF (%)	BOTTOM HALF (%)	MERGED/ LIQUIDATED (%)	
BRAZIL EQUITY FUND	os				
Top Half	135	36.30	31.11	32.59	
Bottom Half	135	27.41	32.59	40.00	
BRAZIL LARGE-CAP F	FUNDS				
Top Half	33	48.48	39.39	12.12	
Bottom Half	33	36.36	42.42	21.21	
BRAZIL MID-/SMALL-0	CAP FUNDS				
Top Half	29	41.38	34.48	24.14	
Bottom Half	28	25.00	28.57	46.43	
BRAZIL CORPORATE	BOND FUNDS				
Top Half	31	35.48	16.13	48.39	
Bottom Half	30	23.33	43.33	33.33	
BRAZIL GOVERNMEN	T BOND FUNDS				
Top Half	107	44.86	43.93	11.21	
Bottom Half	107	42.06	42.99	14.95	
CHILE EQUITY FUNDS	3				
Top Half	21	38.10	28.57	33.33	
Bottom Half	20	30.00	40.00	30.00	
MEXICO EQUITY FUNI	DS				
Top Half	22	50.00	45.45	4.55	
Bottom Half	21	42.86	42.86	14.29	

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