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Persistence of Australian Funds

EXECUTIVE SUMMARY

- While comparing active funds against a benchmark index is a typical practice used to evaluate their performance, persistence is an additional test that reveals fund managers' skills in different market environments.
- In this report, we measure the performance persistence of active funds that outperformed their peers and benchmarks over consecutive three- and five-year periods, and we analyze their transition matrices over subsequent periods.
- A minority of Australian high-performing funds persisted in outperforming their respective benchmarks or consistently stayed in their respective top quartiles for three consecutive years, and even fewer maintained these traits consistently for five consecutive years.
- Over two successive three- and five-year periods, the majority of outperforming funds failed to beat their respective benchmarks, and most funds in the top quartile did not remain there consistently.
- Only 1.1% of the high-performing funds in 2013 maintained a top-quartile rank over the subsequent four consecutive years, and only 1.0% of funds consistently beat their benchmarks over five consecutive years across all fund categories.
- The Australian Bonds category had the lowest turnover in the top quartile, while no funds in the Australian Equity General, International Equity General, or Australian Equity A-REIT fund categories managed to stay in the top quartile over a consecutive five-year period.
- Apart from the Australian Equity General category, not a single fund from the other categories managed to outperform the benchmark consistently over five consecutive years.
- Overall, results from various evaluation matrices suggest weak performance persistence for top-performing funds in Australia across three- and five-year periods.

MEASURING PERFORMANCE PERSISTENCE OF AUSTRALIAN ACTIVE FUNDS

Research suggests that actively managed winning streaks are often short lived. Twice a year, S&P Dow Jones Indices releases the Persistence Scorecard, which tracks the performance consistency of U.S. actively managed funds over consecutive years. We have consistently observed that relatively few U.S. active funds can stay at the top for years.¹ In this report, we use similar matrices to measure the persistence of Australian active funds that outperform their benchmarks and their peers over three- and five-year periods. Our study follows the fund categories and benchmarks defined in the [SPIVA Australia Scorecard](#), a biannual report that tracks the number of active Australian funds that beat their comparable benchmarks over short- and long-term horizons.

Exhibit 1: SPIVA Categories and Their Benchmarks	
SPIVA CATEGORY	BENCHMARK INDEX
Australian Equity General	S&P/ASX 200
Australian Equity Mid- and Small-Cap	S&P/ASX Mid-Small Index
International Equity General	S&P Developed Ex-Australia Large Midcap
Australian Bonds	S&P/ASX Australian Fixed Interest 0+ Index
Australian Equity A-REIT	S&P/ASX 200 A-REIT

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

We measure the following matrices based on Australian active funds that maintain a top-quartile ranking among their peers and those that outperform their respective benchmark indices.

1. Performance Persistence Over Three Consecutive Years
2. Performance Persistence Over Five Consecutive Years
3. Three-Year Transition Matrix—Performance Over Two Non-Overlapping Three-Year Periods
4. Five-Year Transition Matrix—Performance Over Two Non-Overlapping Five-Year Periods

SECTION 1: PERSISTENCE OF FUNDS THAT MAINTAIN TOP-QUARTILE RANKING AMONG THEIR PEERS

Performance Persistence Over Three Consecutive Years (calendar year 2015-2017): As of year-end 2015, there were 183 Australian active funds ranked in their respective top quartiles across five fund categories. Of these, 14 (7.7%) stayed in the top quartile in the next two consecutive years (2016 and 2017). Out of the 77 top-performing Australian Equity General funds, only four of them (5.2%) consistently remained in the top quartile in the following two years. The Australian Equity General funds had the lowest tendency to stay in the top quartile over three consecutive years. In contrast, Australian bond funds had the highest retention rate in the top quartile (see Exhibit 2).

Performance Persistence Over Five Consecutive Years (calendar year 2013-2017): Out of the 177 top-quartile Australian active funds in 2013, only two of them (1.1%) remained in the same quartile in the next four consecutive years (2014-2017). Similar to the observations over the three-year period, the Australian Bonds category had the lowest turnover in the top quartile over five consecutive years. In contrast, no funds in the Australian Equity General, International Equity General, and Australian Equity A-REIT categories managed to stay in the top quartile for five consecutive years (see Exhibit 3).

¹ For details, please refer to the latest [Persistence Scorecard](#).

Exhibit 2: Performance Persistence of Australian Active Funds Over Three Consecutive Years (Calendar Year 2015-2017)

FUND CATEGORY	NUMBER OF FUNDS IN TOP QUARTILE AT START	% OF FUNDS STAYING IN TOP QUARTILE	
	2015	2016	2017
Australian Equity General	77	13.0	5.2
Australian Equity Mid- and Small-Cap	25	32.0	16.0
International Equity General	52	19.2	5.8
Australian Bonds	12	41.7	16.7
Australian Equity A-REIT	17	35.3	5.9
All Categories	183	21.3	7.7

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 29, 2017. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Exhibit 3: Performance Persistence of Australian Active Funds Over Five Consecutive Years (Calendar Year 2013-2017)

FUND CATEGORY	NUMBER OF FUNDS IN TOP QUARTILE AT START	% OF FUNDS STAYING IN TOP QUARTILE			
	2013	2014	2015	2016	2017
Australian Equity General	75	33.3	17.3	0.0	0.0
Australian Equity Mid- and Small-Cap	24	25.0	20.8	4.2	4.2
International Equity General	49	42.9	16.3	6.1	0.0
Australian Bonds	12	16.7	8.3	8.3	8.3
Australian Equity A-REIT	17	29.4	5.9	0.0	0.0
All Categories	177	33.3	15.8	2.8	1.1

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 29, 2017. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Three-Year Transition Matrix (period from year-end 2011 to year-end 2014 versus period from year-end 2014 to year-end 2017): The transition matrix tracks the trajectory of funds in each quartile over two non-overlapping periods. Out of the 71 top-quartile funds in the Australian Equity General category in the three-year period ending December 2014, 31% remained in the top quartile in the subsequent three-year period (year-end 2014-year-end 2017). High-performing funds in the International Equity General and Australian Equity Mid- and Small-Cap categories showed the lowest persistence (only 26.1% maintained a top-quartile rank). In contrast, Australian Bonds had the lowest turnover in the top quartile, but they had a high merged or liquidated rate (18.2%). Furthermore, funds ranked in the bottom two quartiles for the first three-year period had a higher tendency to underperform or be merged or liquidated in the subsequent three-year period across all categories (see Exhibit 4).

Five-Year Transition Matrix (period from year-end 2007 to year-end 2012 versus period from year-end 2012 to year-end 2017): Out of the 138 Australian funds that ranked in their respective top quartile in the five-year period ending December 2012, only 29% remained in the same quartile and 15.2% were liquidated or merged in the subsequent five-year period (year-end 2012-year-end 2017). Among the top-quartile Australian Equity General, International Equity General, and Australian Equity A-REIT funds, more dropped into the bottom quartile or were merged or liquidated than stayed in the top quartile in the following five-year period. In contrast, Australian Bonds exhibited the strongest persistence in the top quartile over the two non-overlapping five-year periods (see Exhibit 5).

Exhibit 4: Three-Year Transition Matrix – Performance Over Two Non-Overlapping Three-Year Periods (Period From Year-End 2011 to Year-End 2014 Versus Period From Year-End 2014 to Year-End 2017)								
QUARTILE	FUND COUNT AT START (YEAR-END 2014)	THREE-YEAR PERCENTAGES AT END (%)					MERGED/ LIQUIDATED	TOTAL
		1ST QUARTILE	2ND QUARTILE	3RD QUARTILE	4TH QUARTILE			
AUSTRALIAN EQUITY GENERAL								
1st Quartile	71	31.0	23.9	19.7	14.1	11.3	100.0	
2nd Quartile	70	17.1	28.6	30.0	15.7	8.6	100.0	
3rd Quartile	71	15.5	19.7	18.3	22.5	23.9	100.0	
4th Quartile	70	18.6	14.3	21.4	30.0	15.7	100.0	
AUSTRALIAN EQUITY MID- AND SMALL-CAP								
1st Quartile	23	26.1	34.8	17.4	8.7	13.0	100.0	
2nd Quartile	22	9.1	36.4	18.2	27.3	9.1	100.0	
3rd Quartile	23	21.7	4.3	34.8	21.7	17.4	100.0	
4th Quartile	22	18.2	18.2	13.6	31.8	18.2	100.0	
INTERNATIONAL EQUITY GENERAL								
1st Quartile	46	26.1	28.3	26.1	13.0	6.5	100.0	
2nd Quartile	45	13.3	15.6	24.4	13.3	33.3	100.0	
3rd Quartile	46	21.7	23.9	13.0	17.4	23.9	100.0	
4th Quartile	45	6.7	13.3	15.6	37.8	26.7	100.0	
AUSTRALIAN BONDS								
1st Quartile	11	54.5	27.3	0.0	0.0	18.2	100.0	
2nd Quartile	12	25.0	33.3	16.7	16.7	8.3	100.0	
3rd Quartile	11	9.1	18.2	36.4	36.4	0.0	100.0	
4th Quartile	11	0.0	18.2	18.2	45.5	18.2	100.0	
AUSTRALIAN EQUITY A-REIT								
1st Quartile	17	35.3	23.5	23.5	11.8	5.9	100.0	
2nd Quartile	16	31.3	25.0	25.0	6.3	12.5	100.0	
3rd Quartile	17	11.8	23.5	23.5	35.3	5.9	100.0	
4th Quartile	16	12.5	12.5	18.8	43.8	12.5	100.0	
ALL CATEGORIES								
1st Quartile	168	31.0	26.8	20.2	11.9	10.1	100.0	
2nd Quartile	165	17.0	26.1	25.5	15.8	15.8	100.0	
3rd Quartile	168	17.3	19.0	20.8	23.2	19.6	100.0	
4th Quartile	164	13.4	14.6	18.3	34.8	18.9	100.0	

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 29, 2017. 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 (Period From Year-End 2007 to Year-End 2012 Versus Period From Year-End 2012 to Year-End 2017)								
QUARTILE	FUND COUNT AT START (YEAR-END 2012)	FIVE-YEAR PERCENTAGES AT END (%)					MERGED/ LIQUIDATED	TOTAL
		1ST QUARTILE	2ND QUARTILE	3RD QUARTILE	4TH QUARTILE			
AUSTRALIAN EQUITY GENERAL								
1st Quartile	59	22.0	20.3	20.3	18.6	18.6	100.0	
2nd Quartile	60	16.7	15.0	23.3	28.3	16.7	100.0	
3rd Quartile	59	13.6	28.8	22.0	20.3	15.3	100.0	
4th Quartile	59	20.3	15.3	16.9	23.7	23.7	100.0	
AUSTRALIAN EQUITY MID- AND SMALL-CAP								
1st Quartile	18	44.4	22.2	16.7	5.6	11.1	100.0	
2nd Quartile	19	0.0	15.8	42.1	21.1	21.1	100.0	
3rd Quartile	18	11.1	27.8	16.7	27.8	16.7	100.0	
4th Quartile	18	27.8	22.2	11.1	27.8	11.1	100.0	
INTERNATIONAL EQUITY GENERAL								
1st Quartile	35	28.6	14.3	22.9	22.9	11.4	100.0	
2nd Quartile	36	22.2	19.4	13.9	11.1	33.3	100.0	
3rd Quartile	35	17.1	20.0	20.0	11.4	31.4	100.0	
4th Quartile	35	17.1	28.6	14.3	11.4	28.6	100.0	
AUSTRALIAN BONDS								
1st Quartile	10	60.0	20.0	10.0	0.0	10.0	100.0	
2nd Quartile	10	30.0	20.0	30.0	0.0	20.0	100.0	
3rd Quartile	9	11.1	22.2	44.4	11.1	11.1	100.0	
4th Quartile	10	0.0	20.0	0.0	40.0	40.0	100.0	
AUSTRALIAN EQUITY A-REIT								
1st Quartile	16	18.8	25.0	31.3	6.3	18.8	100.0	
2nd Quartile	16	37.5	25.0	6.3	31.3	0.0	100.0	
3rd Quartile	15	20.0	20.0	26.7	13.3	20.0	100.0	
4th Quartile	16	6.3	12.5	31.3	31.3	18.8	100.0	
ALL CATEGORIES								
1st Quartile	138	29.0	19.6	21.0	15.2	15.2	100.0	
2nd Quartile	141	19.1	17.7	22.0	21.3	19.9	100.0	
3rd Quartile	136	14.7	25.0	22.8	17.6	19.9	100.0	
4th Quartile	138	17.4	19.6	15.9	23.2	23.9	100.0	

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 29, 2017. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

SECTION 2: PERSISTENCE OF FUNDS THAT OUTPERFORM THEIR RESPECTIVE BENCHMARK INDICES

Performance Persistence Over Three Consecutive Years (calendar year 2015-2017): There were 353 Australian active funds that outperformed their respective benchmarks across five fund categories in 2015; only 25 of them (7.1%) continued to outperform the benchmark in the next two consecutive years (2016 and 2017). Out of the 203 Australian large-cap equity funds that beat the [S&P/ASX 200](#) in 2015, 16 (7.9%) consistently outperformed in the two following years. Outperforming funds in the

Australian Bond category tended to have higher persistence in beating the benchmark over three consecutive years. In contrast, funds in the International Equity General category had the least consistency of outperformance over three consecutive years (see Exhibit 6).

Performance Persistence Over Five Consecutive Years (calendar year 2013-2017): There were 382 Australian active funds that beat their respective benchmark in 2013, and only four of them managed to continue their outperformance in the following four consecutive years (2014-2017). Apart from the Australian Equity General category, not a single fund from the rest of the categories managed to outperform the benchmark consistently over five consecutive years (see Exhibit 7).

FUND CATEGORY	NUMBER OF OUTPERFORMING FUNDS AT START (2015)	% OF FUNDS OUTPERFORMING THE BENCHMARK IN CONSECUTIVE PERIODS	
		2016	2017
Australian Equity General	203	13.3	7.9
Australian Equity Mid- and Small-Cap	73	19.2	4.1
International Equity General	60	11.7	3.3
Australian Bonds	8	62.5	25.0
Australian Equity A-REIT	9	55.6	22.2
All Categories	353	16.4	7.1

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 29, 2017. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

FUND CATEGORY	NUMBER OF OUTPERFORMING FUNDS AT START (2013)	% OF FUNDS OUTPERFORMING THE BENCHMARK IN CONSECUTIVE PERIODS			
		2014	2015	2016	2017
Australian Equity General	208	40.9	33.2	3.4	1.9
Australian Equity Mid- and Small-Cap	71	43.7	39.4	8.5	0.0
International Equity General	47	31.9	14.9	4.3	0.0
Australian Bonds	26	7.7	3.8	0.0	0.0
Australian Equity A-REIT	30	10.0	3.3	0.0	0.0
All Categories	382	35.6	27.7	3.9	1.0

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 29, 2017. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Three-Year Transition Matrix (period from year-end 2011 to year-end 2014 versus period from year-end 2014 to year-end 2017): At year-end 2014, 237 Australian active funds had outperformed their respective benchmarks in their three-year returns. Of these, 51.5% recorded underperformance and 11% of them were merged or liquidated in the subsequent three-year period (year-end 2014-year-end 2017). Outperformers among the Australian Equity Mid- and Small-Cap funds showed the least persistence (22.2%), while those in Australian Equity A-REIT had the highest tendency to continue to outperform (53.3%). Apart from the Australian Bonds category, funds that underperformed in the preceding three years had a much higher tendency to be merged or liquidated in the following three-year period (see Exhibit 8).

Five-Year Transition Matrix (period from year-end 2007 to year-end 2012 versus period from year-end 2012 to year-end 2017): Out of the 275 Australian funds that outperformed in the five-year period ending December 2012, over 52.7% lagged their respective benchmark and 15.6% were

merged or liquidated in the following five years (year-end 2012-year-end 2017). Different from the results observed in the three-year transition matrix, outperforming funds from the Australian Equity Mid- and Small-Cap category exhibited the strongest performance persistence (46.5%), while those in International Equity General had the lowest tendency to continue to outperform (9.1%). Among the Australian Equity General funds that outperformed the benchmark, 34.5% persisted in their outperformance over the two successive five-year periods (see Exhibit 9).

Exhibit 8: Three-Year Transition Matrix – Performance Over Two Non-Overlapping Three-Year Periods (Period From Year-End 2011 to Year-End 2014 Versus Period From Year-End 2014 to Year-End 2017)					
RELATIVE PERFORMANCE	FUND COUNT AT START (YEAR-END 2014)	THREE-YEAR PERCENTAGES AT END (%)			
		OUTPERFORM BENCHMARK	UNDERPERFORM BENCHMARK	MERGED/ LIQUIDATED	TOTAL
AUSTRALIAN EQUITY GENERAL					
Outperform Benchmark	118	44.1	45.8	10.2	100.0
Underperform Benchmark	164	24.4	57.3	18.3	100.0
AUSTRALIAN EQUITY MID- AND SMALL-CAP					
Outperform Benchmark	63	22.2	66.7	11.1	100.0
Underperform Benchmark	27	18.5	59.3	22.2	100.0
INTERNATIONAL EQUITY GENERAL					
Outperform Benchmark	25	32.0	56.0	12.0	100.0
Underperform Benchmark	157	12.7	63.1	24.2	100.0
AUSTRALIAN BONDS					
Outperform Benchmark	16	43.8	37.5	18.8	100.0
Underperform Benchmark	29	10.3	82.8	6.9	100.0
AUSTRALIAN EQUITY A-REIT					
Outperform Benchmark	15	53.3	40.0	6.7	100.0
Underperform Benchmark	51	25.5	64.7	9.8	100.0
ALL CATEGORIES					
Outperform Benchmark	237	37.6	51.5	11.0	100.0
Underperform Benchmark	428	18.9	62.1	18.9	100.0

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 29, 2017. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Exhibit 9: Five-Year Transition Matrix – Performance Over Two Non-Overlapping Five-Year Periods (Period From Year-End 2007 to Year-End 2012 Versus Period From Year-End 2012 to Year-End 2017)					
RELATIVE PERFORMANCE	FUND COUNT AT START (YEAR-END 2012)	FIVE-YEAR PERCENTAGES AT END (%)			TOTAL
		OUTPERFORM BENCHMARK	UNDERPERFORM BENCHMARK	MERGED/ LIQUIDATED	
AUSTRALIAN EQUITY GENERAL					
Outperform Benchmark	113	34.5	47.8	17.7	100.0
Underperform Benchmark	124	33.9	46.8	19.4	100.0
AUSTRALIAN EQUITY MID- AND SMALL-CAP					
Outperform Benchmark	71	46.5	38.0	15.5	100.0
Underperform Benchmark	2	50.0	50.0	0.0	100.0
INTERNATIONAL EQUITY GENERAL					
Outperform Benchmark	44	9.1	77.3	13.6	100.0
Underperform Benchmark	97	11.3	56.7	32.0	100.0
AUSTRALIAN BONDS					
Outperform Benchmark	12	41.7	41.7	16.7	100.0
Underperform Benchmark	27	7.4	70.4	22.2	100.0
AUSTRALIAN EQUITY A-REIT					
Outperform Benchmark	35	17.1	71.4	11.4	100.0
Underperform Benchmark	28	14.3	67.9	17.9	100.0
ALL CATEGORIES					
Outperform Benchmark	275	31.6	52.7	15.6	100.0
Underperform Benchmark	278	21.6	54.7	23.7	100.0

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 29, 2017. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

SECTION 3: CONCLUSION

While comparing returns against a benchmark is a common practice to evaluate the performance of active funds, performance persistence is an additional test on the fund managers' skills at overcoming different market environments. In this report, we measured the performance persistence of active funds that outperformed their peers and benchmarks over consecutive three and five-year periods, and their transition matrices over subsequent time periods.

The results showed that only small portion of Australian outperforming or high-performing funds showed persistent outperformance against their respective benchmarks or consistently stayed in their respective top quartiles over three consecutive years, and even fewer could maintain outperformance for five consecutive years. Out of the top-performing funds in year 2013, only 1.1% and 1.0% persistently maintained a top quartile rank or consistently beat the benchmarks, respectively, in the following four consecutive years.

The transition matrices show that over two successive three- and five-year periods, a majority of outperforming funds failed to beat their respective benchmarks, and most of the top-quartile funds did not remain in the same quartile consistently. Out of the 138 Australian funds that ranked in their respective top quartile in the five-year period ending December 2012, only 29% remained in the same quartile, and 15.2% were liquidated or merged in the subsequent five-year period. Furthermore, of the 275 Australian funds that outperformed their respective benchmark in the five-year period ending December 2012, over 52.7% lagged their respective benchmark and 15.6% disappeared in the following five years. Overall, results from various evaluation matrices suggest weak performance persistence in top-performing funds in Australia across the three- and five-year periods.

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