

## How Expenses and Stars Predict Success

Broad Group	Expense Ratio Quintile Begin Year	Total Return	Total Return Success Ratio	3yr Rating as of 31-March End Year	5yr Rating as of 03/10/2010	Star Rating	Total Return	TR Success Ratio	3yr Rating	5yr Rating	Winner Expense Ratio vs. Star Success Ratio	
2005   5yr	Domestic Equity	Cheapest	3.35	47.83	3.24	3.23	★★★★★	2.79	46.60	3.09	2.96	1.23 expense ratio
		Priciest	2.02	23.39	2.66	2.66	★	1.60	20.44	2.53	2.60	
		Difference	1.33	24.44	0.58	0.57	Difference	1.19	26.16	0.56	0.36	-1.72 stars
	International Equity	Cheapest	6.46	48.03	3.27	3.27	★★★★★	5.74	52.59	3.18	3.10	-4.56 stars
		Priciest	5.25	29.63	2.62	2.70	★	6.53	13.01	2.35	2.45	
		Difference	1.21	18.40	0.65	0.57	Difference	-0.79	39.58	0.83	0.65	-21.18 stars
	Balanced	Cheapest	3.76	49.55	3.30	3.17	★★★★★	3.87	57.89	3.24	3.03	-8.34 stars
		Priciest	2.87	30.26	2.48	2.52	★	3.70	13.33	2.12	2.91	
		Difference	0.89	19.29	0.82	0.65	Difference	0.17	44.56	1.12	0.12	-25.27 stars
Taxable Bond	Cheapest	5.11	63.54	3.55	3.34	★★★★★	5.36	72.43	3.43	3.47	-8.89 stars	
	Priciest	3.82	22.82	2.11	2.30	★	3.74	21.27	2.24	2.30		
	Difference	1.29	40.72	1.44	1.04	Difference	1.62	51.16	1.19	1.17	-10.44 stars	
Municipal Bond	Cheapest	3.83	67.18	3.78	3.74	★★★★★	3.39	65.29	3.62	3.49	1.89 expense ratio	
	Priciest	2.75	9.69	1.95	1.86	★	3.00	12.00	1.93	1.83		
	Difference	1.08	57.49	1.83	1.88	Difference	0.39	53.29	1.69	1.66	4.20 expense ratio	
2006   4yr	Domestic Equity	Cheapest	-0.27	49.40	3.13		★★★★★	-0.76	37.19	2.77		12.21 expense ratio
		Priciest	-1.66	25.86	2.77		★	-1.09	24.18	2.92		
		Difference	1.39	23.54	0.36		Difference	0.33	13.01	-0.15		10.53 expense ratio
	International Equity	Cheapest	1.47	47.44	3.24		★★★★★	-0.17	39.84	2.36		7.60 expense ratio
		Priciest	-0.11	26.68	2.68		★	0.90	24.86	2.96		
		Difference	1.58	20.76	0.56		Difference	-1.07	14.98	-0.60		5.78 expense ratio
	Balanced	Cheapest	2.01	41.40	3.00		★★★★★	2.83	50.00	2.69		-8.60 stars
		Priciest	1.05	26.48	2.83		★	1.10	18.40	3.19		
		Difference	0.96	14.92	0.17		Difference	1.73	31.60	-0.50		-16.68 stars
Taxable Bond	Cheapest	5.51	60.10	3.20		★★★★★	5.62	54.84	2.67		5.26 expense ratio	
	Priciest	4.27	27.05	2.34		★	4.26	24.20	2.51			
	Difference	1.24	33.05	0.86		Difference	1.36	30.64	0.16		2.41 expense ratio	
Municipal Bond	Cheapest	3.87	55.43	3.44		★★★★★	2.81	30.34	2.47		25.09 expense ratio	
	Priciest	2.70	14.67	2.18		★	3.22	24.82	2.63			
	Difference	1.17	40.76	1.26		Difference	-0.41	5.52	-0.16		35.24 expense ratio	
2007   3yr	Domestic Equity	Cheapest	-3.15	52.45	3.14		★★★★★	-3.50	45.47	2.87		6.98 expense ratio
		Priciest	-4.65	29.79	2.75		★	-4.85	26.94	2.70		
		Difference	1.50	22.66	0.39		Difference	1.35	18.53	0.17		4.13 expense ratio
	International Equity	Cheapest	-3.98	49.86	3.25		★★★★★	-5.51	49.19	2.85		0.67 expense ratio
		Priciest	-5.52	34.62	2.71		★	-4.97	28.67	2.71		
		Difference	1.54	15.24	0.54		Difference	-0.54	20.52	0.14		-5.28 stars
	Balanced	Cheapest	-0.49	49.29	2.94		★★★★★	-1.36	38.46	2.51		10.83 expense ratio
		Priciest	-1.29	35.06	2.59		★	-0.97	30.08	2.92		
		Difference	0.80	14.23	0.35		—	-0.39	8.38	-0.41		5.85 expense ratio
Taxable Bond	Cheapest	4.96	64.15	3.20		★★★★★	4.60	57.14	3.10		7.01 expense ratio	
	Priciest	3.58	34.05	2.42		★	3.94	33.63	2.33			
	Difference	1.38	30.10	0.78		Difference	0.66	23.51	0.77		6.59 expense ratio	
Municipal Bond	Cheapest	3.51	70.89	3.62		★★★★★	1.55	43.22	2.67		27.67 expense ratio	
	Priciest	2.21	26.54	2.10		★	2.86	35.38	2.22			
	Difference	1.30	44.35	1.52		Difference	-1.31	7.84	0.45		36.51 expense ratio	

2008 data continued on Page 2

## How Expenses and Stars Predict Success (continued from Page 1)

Broad Group	Expense Ratio Quintile Begin Year	Total Return	Total Return Success Ratio	3yr Rating as of 31-March End Year	5yr Rating as of 03/10/2010	Star Rating	Total Return	TR Success Ratio	3yr Rating	5yr Rating	Winner Expense Ratio vs. Star Success Ratio
Domestic Equity	Cheapest	-1.85	49.93			★★★★★	-2.85	39.35			10.58 expense ratio
	Priciest	-3.13	30.34			★	-2.28	33.07			
	Difference	1.28	19.59			Difference	-0.57	6.28			13.31 expense ratio
International Equity	Cheapest	-6.72	52.65			★★★★★	-6.94	52.70			-0.05 stars
	Priciest	-8.01	35.34			★	-7.44	39.35			
	Difference	1.29	17.31			Difference	0.50	13.35			3.96 expense ratio
Balanced	Cheapest	-0.04	54.21			★★★★★	0.33	65.96			-11.75 stars
	Priciest	-1.13	39.04			★	-1.04	31.75			
	Difference	1.09	15.17			Difference	1.37	34.21			-19.04 stars
Taxable Bond	Cheapest	5.37	59.33			★★★★★	6.18	78.31			-18.98 stars
	Priciest	4.41	39.43			★	1.99	17.97			
	Difference	0.96	19.90			Difference	4.19	60.34			-40.44 stars
Municipal Bond	Cheapest	4.69	70.72			★★★★★	5.04	82.56			-11.84 stars
	Priciest	3.72	22.15			★	3.27	15.48			
	Difference	0.97	48.57			Difference	1.77	67.08			-18.51 stars

This table shows how the lowest- and highest-cost quintiles in each category fared from a point in time forward through March 2010. We then subtract the results from the priciest quintile from the cheapest quintile to see what the difference was. A positive figure indicates that lower expense ratios performed better than higher expense ratios. Total return figures are annualized. We did the same for the star rating, with 5 stars on top and 1 star below. Again, a positive figure indicates that 5-star funds performed better than 1-star funds. Finally, on the far right we compare 5-star funds with cheapest-quintile funds and say which did better. We also compare the differences in success ratio of 5- and 1-star funds and cheap and expensive funds to see which measure did a better job of separating winners from losers. For example, you can see that for the class of 2005 domestic equity, cheap funds did slightly better than star ratings. However, the gap in success from 5-star and 1-star funds was greater than that for expense ratios, so it did a better job of separating winners from losers. Overall, you can see that the star rating fared better in the periods beginning in 2005 and 2008 but expenses were the better guide in 2006 and 2007.