

**Table 9. Profitability of Trading against ETF Mispricings, January 2007–December 2014
(t-statistics in parentheses)**

Benchmark Model	Intercept (annual %)	Information Ratio (annual)	Residual Volatility (annual %)	Beta				df	R ²
				Mkt. Rf.	SMB	HML	UMD		
<i>A. Including all funds</i>									
None	7.00 (13.14)	4.68	1.50					1973	0.0%
CAPM	6.84 (13.58)	4.76	1.44	0.02 (4.90)				1972	7.9
FF	6.84 (13.62)	4.81	1.42	0.02 (4.80)	-0.02 (-2.33)	-0.01 (-1.04)		1970	9.9
Carhart	6.84 (13.60)	4.81	1.42	0.02 (4.92)	-0.02 (-2.33)	-0.01 (-0.90)	0.00 (0.31)	1969	9.9
<i>B. Excluding diversified US equities, US government bonds, commodities, miscellaneous</i>									
None	10.50 (14.05)	5.00	2.10					1973	0.0
CAPM	10.32 (14.43)	5.06	2.04	0.02 (4.50)				1972	5.9
FF	10.33 (14.46)	5.10	2.03	0.03 (3.91)	-0.03 (-2.08)	-0.01 (-0.39)		1970	7.2
Carhart	10.33 (14.44)	5.10	2.03	0.03 (3.90)	-0.03 (-2.06)	-0.01 (-0.51)	0.00 (-0.56)	1969	7.3
<i>C. Excluding diversified US equities, US government bonds, sector funds, commodities, miscellaneous</i>									
None	16.41 (13.55)	4.82	3.40					1973	0.0
CAPM	16.19 (13.86)	4.83	3.35	0.03 (3.05)				1972	3.2
FF	16.18 (13.91)	4.86	3.33	0.03 (2.73)	-0.04 (-1.85)	-0.02 (-0.72)		1970	4.4
Carhart	16.19 (13.90)	4.86	3.33	0.0 (2.70)	-0.04 (-1.84)	-0.02 (-0.85)	-0.01 (-0.74)	1969	4.5

Notes: This table shows the returns on a fully invested but unlevered long-short portfolio that takes positions against the estimated mispricings. The t-statistics are based on White's standard errors. For these calculations, levered and inverse funds are counted as part of their underlying style, so they are included with other funds that track the same index (and thus are not excluded with the "Miscellaneous" category).

