

## The Lazy Portfolio Manager

Lazy Portfolio Managers are probably the greatest single reason for equity index fund tracking errors that are generally small and even favorable (positive) when the market is weak and nearly always unfavorable (negative) when the market is strong.

One of the important differences between investment company ETFs and mutual funds is that the ETF portfolio manager does not need to hold cash balances to meet cash redemptions. The ETF portfolio manager who wants to manage cash aggressively can be invested down to the fund's last few dollars each day without any unusual cash flow management problems. In fact, however, many ETF portfolio managers do not invest their cash aggressively. Many funds show a pattern of returns that suggests the manager consistently holds excess cash. During years when the stock market rises, these funds lag the performance of their benchmark index because interest on cash balances is not keeping up with the return on the stocks or other instruments in the index. The same index funds will look too good to be true in a year like 2008 when their cash balances earn modest positive returns while portfolio positions perform poorly. In retrospect, a cash balance would not have been a bad idea in 2008, but the long-term question is what the portfolio manager in an index ETF should be doing. Clearly, an important part of the mandate for an index fund manager is to deliver a return representative of the index. If the portfolio manager's mandate is asset allocation or market timing (in the sense of reducing or increasing equity exposure to anticipate the direction of the market) then a cash balance is certainly appropriate – at times. In most index ETFs, however, holding cash balances all the time is not part of the portfolio manager's job description. The accompanying exhibit shows Annual Tracking Error in Two Down Years and Four Up Years for a group of funds that have been in operation since 2001.

The exhibit shows tracking error calculations for a group of 30 U.S. ETFs that have been in existence since 2001. These funds all have domestic U.S. stock portfolios. While the S&P 500 annual performance indicated at the top of the column for each year may not be representative of the portfolio in each fund, it is a fair surmise that 2002 and 2008 were down years for all of these funds and 2003, 2006, 2009 and 2010 were up years. As the column totals and the average tracking error for each fund in these years indicates, the tracking errors were smaller in the down years. In 2008 the average ETF in the sample even had a small positive tracking error. In the up years of 2003 and 2006 every one of the ETFs had a negative tracking error and in 2009 and 2010 only one fund had a positive tracking error in each of those years. The only reasonable interpretation of these results is that, on balance, these funds carried significant cash balances in all six years.

<b>Annual Tracking Error in Two Down Years and Four Up Years</b>							
		<b>Down Years</b>		<b>Up Years</b>			
<b>S&amp;P 500 Annual Performance</b>		<b>-21.98</b>	<b>-36.55</b>	<b>28.25</b>	<b>15.49</b>	<b>26.46</b>	<b>15.1</b>
<b>Fund Type</b>	<b>Symbol</b>	<b>Down 2002</b>	<b>Down 2008</b>	<b>Up 2003</b>	<b>Up 2006</b>	<b>Up 2009</b>	<b>Up 2010</b>
S&P Depository Receipts (SPDR)	SPY	1	12	-30	-14	-19	-17
iShares Russell 1000	IWB	-7	3	-25	-17	-10	-16
Vanguard Total Market <sup>1</sup>	VTI	-10	7	-21	-5	6	-3
iShares Russell 3000	IWV	-9	1	-29	-20	-14	-18
iShares DJ US Total Market	IYY	-9	-10	-33	-25	-24	-21
Power Shares QQQ2 <sup>2</sup>	QQQQ	-12	-10	-34	-26	-16	-25
Diamonds Trust	DIA	-11	-1	-30	-23	-21	-23
S&P MidCap 400 SPDR	MDY	-5	-43	-46	-30	-53	-47
iShares S&P MidCap 400	IJH	-21	3	-25	-18	-15	-26
iShares S&P MidCap 400 Growth	IJK	-24	-1	-19	-6	-23	-32
iShares Russell MidCap	IWR	2	4	-33	-22	-22	-22
iShares Russell 2000	IWM	-4	13	-31	-19	-4	-9
iShares S&P SmallCap 600 Growth	IJT	-19	6	-26	-24	-13	-18
iShares S&P SmallCap 600	IJR	-11	-2	-20	-18	-8	-17
Vanguard Extended Market ETF <sup>3</sup>	VXF	-24	34	-29	18	-4	9
iShares S&P 500 Growth	IVW	-9	-3	-24	-20	-22	-20
iShares Russell 1000 Growth	IWF	-11	-3	-29	-20	-28	-24
iShares Russell 2000 Growth	IWO	-3	11	-35	-22	-9	-2
iShares S&P 500 Value	IVE	-13	-2	-28	-21	-1	-20
iShares Russell 1000 Value	IWD	-16	2	-32	-24	-6	-22
iShares Russell 2000 Value	IWN	-9	18	-41	-29	-18	-20
Technology Sector SPDR	XLK	-15	40	-46	-22	-50	-25
iShares S&P North American Technology	IGM	-31	-18	-61	-53	-83	-52
Financial Sector SPDR	XLF	-19	6	-53	-39	25	-20
iShares DJ US Financial Sector	IYF	-46	-6	-86	-62	-23	-48
Consumer Discretionary Sector SPDR	XLY	-21	6	-44	-19	-17	-46
iShares US Consumer Goods <sup>5</sup>	IYK	-58	-21	-73	-59	-67	-54
Energy Sector SPDR	XLE	-19	-9	-49	-28	-27	-27
Industrial Sector SPDR	XLI	-22	1	-59	-30	-16	-34
<b>Column Totals</b>		<b>-455</b>	<b>38</b>	<b>-1091</b>	<b>-697</b>	<b>-582</b>	<b>-699</b>
<b>Average per fund (rounded)</b>		<b>-16</b>	<b>1</b>	<b>-38</b>	<b>-24</b>	<b>-20</b>	<b>-24</b>
<sup>1</sup> formerly Vanguard Total Market VIPERS							
<sup>2</sup> formerly Nasdaq-100 Index Tracking Stock							
<sup>3</sup> formerly Vanguard Extended Market VIPERS							
<sup>4</sup> formerly iShares Goldman Sachs Technology Index							
<sup>5</sup> formerly iShares DJ US Consumer Cyclical							
All calculations are Fund Return minus Index Return so the tracking error includes the expense ratio. Sources: Morgan Stanley, Barclays Global Investors, State Street Global Investors, Thomson, Bloomberg							