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# **Le Gestioni Passive: Le soluzioni offerte dagli ETF**

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**«Good Ideas, Like Bad Ones, Are Not Bought. Apparently, They Have to Be Sold. And That Costs Money [*and Time*]»**

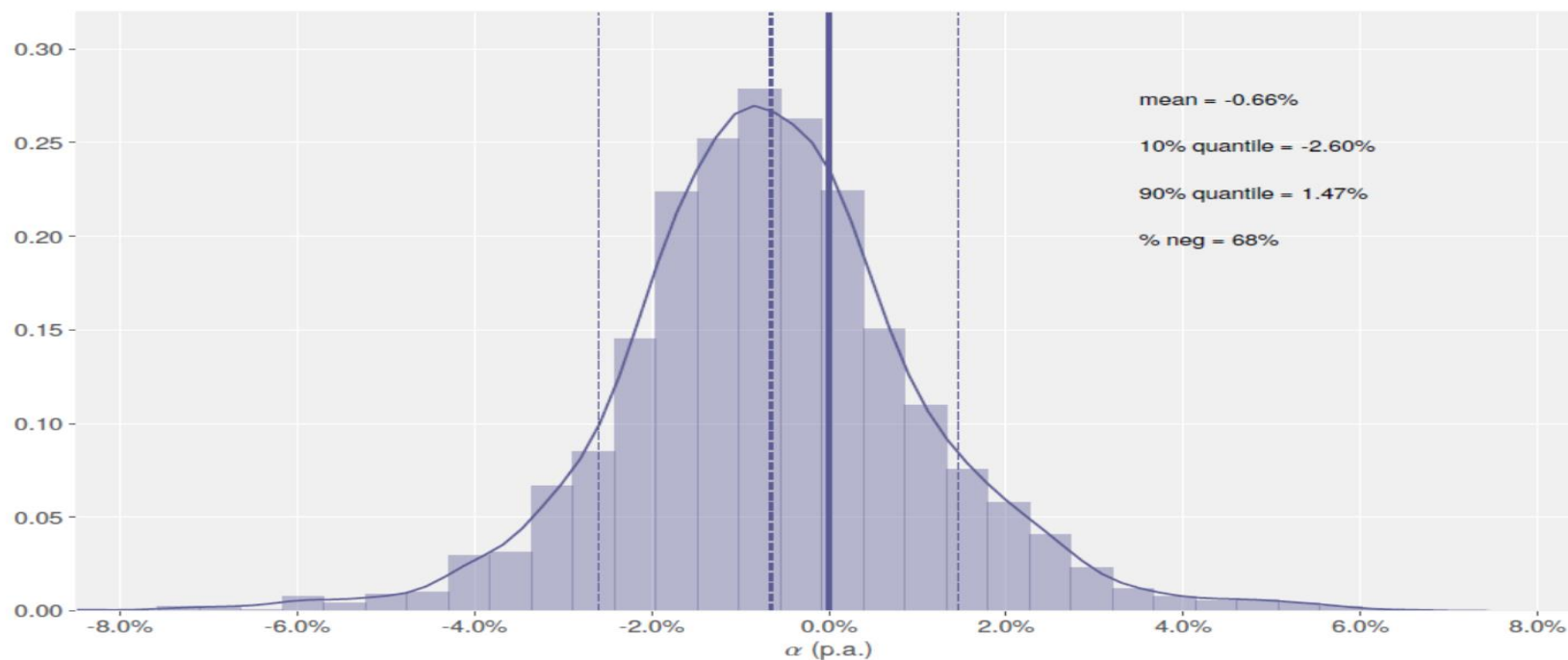
**Paul Samuelson (1976), Index Fund Investing.**

- ❑ *Out of the 100 best money managers a few are bound to do better than most. But the baton of good performance passes from hand to hand so randomly as to lead the trained statistician to the following disappointing [efficient market] hypothesis:***
- ❑ *«After one corrects portfolio records for volatility and mean return, the best and the worst are only about as good and bad as one would expect to occur by chance alone» Paul Samuelson (1976), Investment Secrets.***



## Actively Managed Mutual Funds Underperforming

Histogram of  $\alpha$  (p.a.) for 4 Factor Model



Notes: This figure shows the histogram of  $\alpha_i$ 's of time series regressions of returns of mutual fund  $i$ ,  $R_{it}$  on factors  $\mathbf{F}_t$ :

$$R_{it} - R_{ft} = \alpha_i + \beta' \mathbf{F}_t + \epsilon_t,$$

for the 4-factor model with  $\mathbf{F}_t = (R_{Mt} - R_{ft}, HML_t, SMB_t, UMD_t)'$ . The factor returns are from Kenneth French's website. Mutual fund returns are from CRSP. The sample is monthly from January 1980 to December 2014.

# Active Management Style in the ETF Space.

## Performance Results reported in Brad Zigler (2018)

18/7/2018

Can You Get Alpha Out Of ETFs?

Fund	Annual Return (%)	Standard Deviation (%)	Maximum Drawdown (%)	Sharpe Ratio	r <sup>2</sup>	Beta	Alpha
FTLB	9.62	6.46	-5.76	1.26	42.44	0.51	2.64
FTHI	10.31	6.19	-5.52	1.42	57.91	0.57	2.44
SYE	13.29	7.25	-4.76	1.59	86.18	0.81	1.95
DIVO	12.59	8.20	-6.20	1.34	63.82	0.79	1.68
PHDG	10.68	9.62	-6.53	1.01	38.91	0.70	1.28
DUSA	16.56	10.40	-7.83	1.41	83.74	1.15	0.60
FWDD	12.44	8.72	-6.28	1.25	74.18	0.91	0.04
HUSV	4.95	6.31	-4.74	0.60	61.12	0.60	-2.91
CCOR	-1.60	3.62	-4.80	-0.76	10.01	0.14	-3.39
SPY	13.78	8.26	-6.28	1.46	100.00	1.00	0.00

# Getting Alpha out of Active ETFs: Cost Efficiency

## Measure Based on Ross Miller (2005) as reported in Brad Zigler (2018)

Fund	Alpha vs. SPY	Active Weight (%)	Active Alpha	Cost Efficiency
PHDG	1.28	55.61	2.30	3.29
SYE	1.95	28.59	6.82	3.25
FTLB	2.64	53.80	4.91	3.11
FTHI	2.44	46.02	5.30	2.87
DIVO	1.68	42.95	3.91	1.75
DUSA	0.60	30.59	1.96	0.92
FWDD	0.04	37.11	0.11	0.03



## Leveraged ETF and Statistical Arbitrage

$$\frac{r_{LETF}}{r_M} - \lambda = \frac{(\lambda^2 - \lambda)}{2} r_M - \frac{(\lambda^2 - \lambda)T}{2} \frac{\sigma^2}{r_M},$$

where  $r_{LETF}$  is the cumulative return on the LETF,  $r_M$  is the cumulative return on the index,  $\lambda$  is

the leverage multiple,  $T$  is the length of the holding period, and  $\sigma^2$  is the index variance.

□ ***We could put in a place a long-short position – for example, ( $\lambda$ -leveraged) long position in the underlying index and a short position in the leveraged ETF (or vice-versa). It turns out that the performance of this (zero-cost) strategy is given by (the term in square-bracket can be positive or negative, depending on realized volatility,  $\sigma^2 T$ , and variance swap performance,  $(r_M)^2$ ),***

$$\pm(\lambda - 1) \frac{\lambda}{2} [\sigma^2 T - (r_M)^2]$$

## Passive vs. active investment: competition for market shares and implications for corporate governance

- ❑ **Key insight: although index funds are locked into their investments, their investors are not. Like all mutual fund shareholders, investors in index funds can exit at any time by selling their shares and receiving the net asset value of their ownership interest**
- ❑ ***This exit option causes active and passive to compete for investors both on price and performance***
- ❑ ***Because passive funds cannot compete by exiting underperforming companies, they must compete by using “voice” (e.g. corporate engagement) to prevent asset outflow towards active funds***

## **Passive vs. Active Investment: Competition for Market Shares and Implications for Companies Corporate Governance**

- As passive investment grows it should be devoting increasing resources to engagement in improving corporate governance and management monitoring***
- ETF holdings concentration and the anti-competitive effects of large and diversified common ownership of listed companies in the stock markets***
- In theory, common ownership can also have efficiency-enhancing effects. But consolidation in the asset management industry can adversely affect competition in the product markets of their portfolio companies (this is an issue for Regulators, including Anti-Trust)***