
JENSEN'S ALPHA

Description of the Measure :

The Jensen's Alpha is an absolute measure of performance. It is given by the annualized return of the fund, deducted the yield of an investment without risk, minus the return of the benchmark multiplied by the fund's beta (see risk indicator) during the same period.

Interpretation:

The Jensen's Alpha gives the excess return obtained when deviating from the benchmark.

Use:

The magnitude of the Jensen's Alpha depends on two key variables: the return of the benchmark and the beta. This indicator represents the part of the mean return of the fund that cannot be explained by the systematic risk exposure to market variations.

Potential Misuse:

As it is an absolute measure, it does not reflect completely the risk of the fund. It is then generally easier for a more risky fund to exhibit a greater Jensen's Alpha than for a less risky fund. It should be then applied on homogenous class of assets. Moreover, the validity of this measure depends crucially on the hypothesis that

the beta of the fund is stationary, i.e. that the manager of the fund does not adapt his/her portfolio's weight according to his/her expectation on the future market variations. The validity of this hypothesis has to be tested before focusing on the value of this indicator.

Formula:

$$\hat{\alpha}_t = \left[E_t(R_{p,t}) - R_f \right] - \hat{\beta}_p \left[E_t(R_{m,t}) - R_f \right]$$

where:

$E_t(R_{p,t})$ is the annualized mean return on the fund considered over period;

$E_t(R_{m,t})$ is the annualized mean return on the market portfolio considered over period;

R_f is a proxy for the riskless rate;

$\hat{\beta}_p$ is the estimated sensitivity of the fund return to the benchmark variations.

Two year data of weekly series is considered.

References:

- ✦ Jensen M., (1968), “ The Performance of Mutual Funds in the Period 1945-1964 ”, *Journal of Finance* 23, May 1968, 389-416.
- ✦ Jensen M., (1972), “ Optimal Utilization of Market Forecasts and the Evaluation of Investment Performance ”, in Mathematical Methods in Investment and Finance, Szegö and Shell Ed., North Holland, 1972, 311-335.
- ✦ Grinblatt M. and S. Titman, (1987), “ The Relation between Mean-Variance Efficiency and Arbitrage Pricing ”, *Journal of Business* 60 (1), 1987, 97-112.

- ✦ Grinblatt M. and S. Titman, (1989), “ Portfolio Performance Evaluation: Old Issues and New Insights ”, *Review of Financial Studies* 2 (3), 1989, 393-421.
- ✦ Grinblatt M. et S. Titman, (1992), “The Persistence of Mutual Fund Performance”, *Journal of Finance* 47 (5), December 1992, 1977-1984.