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*KESTNER (1996)*  
*STERLING'S RATIO*

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*Description of the Measure:*

The Sterling's ratio is a relative measure of performance. It is defined as the annualized return of the fund, deducted the yield of an investment without risk, divided by a scaled average annual maximum draw-down on a given period.

*Interpretation:*

The Sterling's ratio is conceived to provide information about the mean return obtained by the portfolio manager put in perspective with the potential maximum loss borne by the investor.

*Use:*

The Sterling's ratio belongs to the family of the so called risk adjusted indicators that combine return and risk in one single value. It is useful to evaluate the quality rather than the quantity of the returns of a fund. It represents the return by risk unit approximated by the average draw-down. The highest

the reading of the indicator, the better the quality of the returns on a relative Reward/risk basis.

Potential Misuse:

This ratio reliability depends on the quality of the measure of draw-downs. Therefore, it relies on the stability of the management process and to the risk exposure.

Formula:

$$\text{Sterling}_{p,t} = \frac{E_t(R_{p,t})}{E_t(\text{Drawdown}_{p,t}) + 10\%}$$

where:

$E_t(R_{p,t})$  is the expected annual return;

$E_t(\text{Drawdown}_{p,t})$  is the average maximum annual drawdown;

Reference:

Kestner L., (1996), "Getting a Handle on True Performance", *Futures* 25, 44-46.