

Sufficient Conditions for Expected Utility to Imply Drawdown-Based Performance Rankings

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Abstract

The least restrictive sufficient condition for expected utility to imply Sharpe ratio rankings is the location and scale (LS) condition (see Meyer, 1987). The LS condition includes the normal and many other (asymmetric and leptokurtic) distributions commonly used in finance. In this paper we argue that this condition is also sufficient for expected utility to imply drawdown-based performance measure rankings because for investment funds satisfying the LS condition, it does not matter whether funds are ranked with the Sharpe ratio or with a drawdown-based performance measure as the rankings are identical. Hence, the same conditions that provide an expected utility foundation for the Sharpe ratio also provide an expected utility foundation for drawdown-based performance measures. Theoretically drawdown-based performance measures are as good as the Sharpe ratio.

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