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SELECTING STABLE STOCKS IN BEAR MARKET

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Summary

After the occurrence of short-term events such as the Wall Street market crash in 1929, or the stock market panic in 2008, the downward trend of a bear market normally continues over a period of time. The bear market effect may catastrophically result in pessimistic views of investors, which may consequently drive asset away from the market. Such negative sentiment feeding on itself may accelerate pessimistic circles in some stock markets. For stock data accumulated in a bear market, the downward trend and depressing environment underlying the data invalidates the normal model assumption regarding random fluctuations around an unknown mean market-return. This necessitates a new method of modeling for bear market data. In this paper, we present a simultaneous inference approach to compare more than one stock volatilities and to identify stable stocks in a bear market. The new method features a portfolio strategy to minimize the loss in a bear market.

Keywords: Skew normal distribution, log return, simultaneous confidence set, stock price, stock volatility.
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