

In Gatarek and Johansen (2014) the optimal hedging strategy with the Cointegrated Vector Autoregressive Model (CVAR) has been derived. The optimal hedging strategy has been shown to highly depend on the hedging horizon. The informational content of the covariance matrix is a key driver for the 1-period ahead hedge, and on the other hand the cointegration parameters are implicative for the size of the hedge in the infinite horizon.

In the current paper, based on the insights from the hedging methodology derived previously, the authors develop a novel approach to optimal portfolio construction with the CVAR. The optimal portfolio is derived under the objective of Sharpe ratio maximization. Similarly to the hedging case, the portfolio holding horizon is a key determinant of the optimal portfolio construction under Sharpe ratio maximization principle.