

The thesis deals with high-order stochastic dominance of random variables and portfolios. The summary of findings about high-order stochastic dominance and portfolio efficiency is presented. As a main part of the thesis it is proven that under assumption of both normal and gamma distribution the infinite-order stochastic dominance is equivalent to the second-order stochastic dominance. The necessary and sufficient condition for the infinite-order stochastic dominance portfolio efficiency is derived under the assumption of normality. The condition is used in the empirical part of the thesis where parametrical approach to the portfolio efficiency is compared to the nonparametric scenario approach. The derived necessary and sufficient condition is based on the assumption of normality; therefore we use two sets of data, one with fulfilled assumption of normality and the other for which the assumption of normality was unambiguously rejected. Consequently, the influence of fulfillment of the normality assumption on the results of the necessary and sufficient condition for portfolio efficiency is estimated.