

# Testing for stochastic dominance using circular block methods

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## 1 General Information

This paper investigates the performance of various tests on stochastic dominance for dependent data. We consider the tests of Schmid and Trede (1997), of Xu, Fisher and Willson (1997) and of Linton, Maasoumi and Whang (2003). The dependence structures explored are the contemporaneous correlation between samples and conditional heteroskedasticity within samples. Simulations show that with the proposed bootstrap methods the tests perform rather poorly for small samples. We develop new circular bootstrap methods which make the tests of Schmid and Trede and of Linton, Maasoumi and Whang robust to the mentioned dependence structures. We determine the block lengths which make the tests keep the size and explore the power of the tests. The tests are applied to the daily returns of some German stocks.

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