A Copula Test Space Model How to Avoid the Wrong Copula Choice

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Abstract: We introduce and discuss the test space problem as a part of the whole copula fitting process. In particular, we explain how an efficient copula test space can be constructed by taking into account information about the existing dependence, and we present a complete overview of bivariate test spaces for all possible situations. The practical use will be illustrated by means of a numerical application based on an illustrative portfolio containing the SP 500 Composite Index, the JP Morgan Government Bond Index and the NAREIT All index.

Keywords: copula; Kendall's tau; goodness-of-fit; copula test space; associated copulas;

AMS Subject Classification: 62H20; 62P05; 62H12;

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