A vine copula approach to study of volatility and dependency of chinese outbound tourism demand destinations: singapore, malaysia, and thailand

Jianxu liu, songsak sriboonchitta, hung t. Nguyen, and vladik kreinovich

Abstract

This paper investigates the volatility and dependence of chinese tourism demand for singapore, malaysia, and thailand (smt) destinations, using the vine copula based auto regression moving average-generalized autoregressive conditional heteroskedasticity (arma-garch) model. It is found that a jolt to the tourist flow can have long-standing ramifications for the smt countries. The estimation of the vine copulas among smt show that the survival gumbel, frank, and gaussian copulas are the best copulas for c-vine or d-vine among the possible pair-copulas. In addition, this paper illustrates the making of time-varying frank copulas for vine copulas. Finally, there is a discussion on tourism policy planning for better managing the tourism demand for the smt countries. We suggest tour operators and national tourism promotion authorities of smt collaborate closely in the marketing and promotion of joint tourism products.

Keywords: copula-garch model, c-vine copula, d-vine copula, dependence, volatility
ABSTRACT

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