Abstract

Dependence between financial markets is a key concern for investors who seek to diversify their portfolios as they manage risks arising as a result of their investment decisions. In this paper we apply the copula theory to model dependence between the equity and the exchange rate markets of Kenya. We use the Semi Parametric Copula Based Multivariate Dynamical (SCOMDY) model proposed by (Chen and Fan, 2006) to estimate the dependence between these two markets. Using the moving window maximum likelihood estimation technique, we extend the SCOMDY estimator to capture time variation in the dependence. Our findings point to symmetric dependence in the markets. Amongst the parametric copula models fitted into the data, the t copula with 10 degrees of freedom is found to be the most appropriate for capturing the static dependence over the entire study period. Extreme value dependence is also present in the bivariate series whereby both markets rise and fall during periods of boom and bust. The hypothesis of homogeneity in dependence is rejected in all but three trading periods, pointing to the insufficiency of static parametric copula models to capture the dependence.