On properties of Lee's bivariate spatial association measure

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Abstract

Sang-Il Lee ([2], [3]) developed and analysed a new bivariate spatial association measure (cited by many authors who discussed the measure from theoretical as well as practical point of view). He noted that a bivariate spatial association measure should be a composite of three elements: univariate spatial associations of two variables and their point-to-point association in a certain form. The idea led him to construction the bivariate measure (called L) connected with decomposition of Moran's I. The L statistics integrates Pearson's r and Moran 's I and heavily depends on (introduced by Sang-Il Lee) a spatial smoothing scalar (SSS). In the paper we examine some results obtained by Sang-Il Lee dropping (changing) some theoretical assumption used in the definition (decomposition) of L.

Keywords

Pearson's r, Spatial autocorrelation, Moran's I, Bivariate spatial association measure.

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