The Geography of Gravity

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Abstract

Although geography has been considered as an important factor in international trades, the spatial heterogeneity has not been fully investigated in the regression of the standard gravity models. This paper contributes to the literature by investigating how the gravity in bilateral trades works geographically. First, geographically weighted Poisson regression of the gravity model reveals the regional variations of estimated parameters. Second, the regional or continental dummies in the standard gravity model appear not fully to capture these geographical characteristics. Third, which location to use in the regression, whether exporter's or importer's, remarkably influences the coefficient values of exporter's and importer's variables such as GDP.

Keywords: Gravity model; geographically weighted Poisson regression; geography
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