## The Effect of Power and Space on Foreign Diplomatic Presence in the United States: a Spatial Modeling Approach

Imam M. Xierali<sup>1</sup>, Lin Liu<sup>2,3</sup>

<sup>1</sup>Georgia Division of Public Health, Office of Health Information and Policy, 2 Peachtree Street, Atlanta, Georgia, 30303

<sup>2</sup>Pepartment of Geography, University of Cincinnati, P.O.Box 210131, Cincinnati, OH 45221-0131

<sup>3</sup>School of Geography and Planning, Sun Yat-sen University, Guangzhou 510275, P.R.China

E-mail: lin.liu@uc.edu

## Abstract

This article explains the variations in foreign diplomatic presence in the U.S. from 1980 to 2000 as a function of the national capabilities of and spatial relationship among nations. We decompose spatial effect into three measures: spatial proximity, spatial dependence, and spatial heterogeneity. We found significant spatial dependence both in the diplomatic interaction and capabilities of nations. Spatial variation in foreign diplomatic presence was adequately explained by national capabilities of U.S. diplomatic partners from 1980 to 1992. However, after 1992, international power distribution alone could no longer fully explain the spatial variations in the foreign diplomatic presence in the U.S.. Spatial effect must be taken into account when explaining the variations in the foreign diplomatic presence in the U.S..

## Keywords

Diplomatic relations, national power, spatial interaction, the United States, spatial error model.