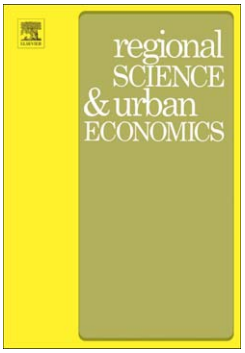


# Location choices of newly created establishments: Spatial patterns at the aggregate level

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# Location choices of newly created establishments: spatial patterns at the aggregate level

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**Abstract**

This paper explores the problems associated with the location choice of newly created establishments at the aggregate level. Much work has been done in this domain, however, several issues arise when analyzing involved phenomena, which scholars have yet to fully explore: 1) addressing the excess of zeros problem in the location choice model in highly heterogeneous geographic areas and 2) determining the appropriate way to accommodate spatial effects for location decisions. We tested models that include both stocks of pre-existing establishments and variables that represent measures of accessibility to the workforce and population, proximity to shops, services, transport infrastructure, availability of land, as well as prices and tax levels. We concluded that an establishment does not act in isolation during its decision-making processes and that it is likely to be influenced by other establishments located nearby. When selecting the appropriate location in which to set up in the market, an establishment may consider not only the characteristics of a particular area, but also the characteristics of neighboring zones. Having estimated 84 nested and non-nested count data models, we found that the hurdle models are preferred for taking into account the presence of excess zeros. Hurdle models offer greater flexibility in modeling zero outcomes and relax the assumption that the zero observations and the positive observations come from the same data generating process. In addition, the paper finds that the models tested with the distance matrix indicate that the incorporation of spatial spillovers leads to an enhancement in the models' performance.

*Keywords:* Location choice model; Count data models; Hurdle model; Spatial spillovers

**JEL Classification:** C35, D21, R12

## 1. Introduction

The present paper explores the problems associated with the location choice of newly created establishments at the aggregate level within the Paris metropolitan area in the year 2007. Applications of disaggregate discrete choice modeling to analysis of birth, death, evolution, and location of establishments in the Paris region have been carried out by de Palma et al. (2008) and Motamedi (2008). We also refer the reader to the European SustainCity Project[2]. Much work has been done in this domain. However, several issues

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