

## **To what extent location choices of new and relocating economic establishments differ in terms of preference for accessibility?**

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### **1. Context**

Duranton and Puga (2001), Holl (2004) and Manjón-Antolín and Arauzo-Carod (2011) showed that new and relocating firms choose their location differently. They are not attracted by the same location attributes. Nevertheless, most studies suppose implicitly that accessibility has the same impact on location choices for both new and relocated firms. In this paper, we question this assumption. We propose to analyse whether new and migrating economic establishments have different preferences for accessibility using an empirical study in Lyon urban area, France. Policy making is important at the urban level, because often we are talking about competition between cities in attracting new businesses. So, knowledge on how accessibility can affect the location choices of economic establishment at such a spatial level is important for correct policy instruction. Omitting this distinction can lead to biased results and misplaced policy instructions (Manjón-Antolín & Arauzo-Carod, 2011). For example transport policies aiming to attract new firms could provoke relocations from nearby locations rather than firm creations at the expense of nearby areas (Holl, 2004).

### **2. Objectives and case study**

To our knowledge, few works have compared the location choices of new and relocating establishments. Duranton and Puga (2001) studied the differences in preferences for specialisation or diversity of various economic sectors in France. Manjón-Antolín and Arauzo-Carod (2011) studied the creations and relocations of manufacturing plants in the region of Catalonia but their interest was not the accessibility. Last, Holl (2004a) focuses on manufacturing sector in Portugal and analyses the creations and relocations with an interest for accessibility. In this paper, we are willing to take a step forward and give some empirical evidence on the difference of the effect of accessibility between new and migrated economic establishments for various economic sectors.

The study focuses on the Lyon urban area, which is situated at the east central part of France. It is the second largest metropolitan area in France after Paris in economic and population terms. The urban area has a surface of about 3,3 thousand squared km and in 2011 had a population of 1,85 million people. It is considered as a dynamic economic area with an international character due to the proximity with Italy, Switzerland and Germany (Rosales-Montano, Aguilera-Belanger, Mignot, & Terral, 2015). The Gross Domestic Product of the metropolitan area in 2011 was almost 73 billion euros (Eurostat), which places the urban area among the 25 top European metropolitan regions in terms of total gross production.

### **3. Data, method and contributions**

In order to compare the behaviour of new and relocated firms, we have developed a location choice model at a micro level applied to the case study of Lyon. The model is a multinomial logit model where we are using the full choice set (432 alternatives) and we are estimating joint models for new and

relocated establishments in order to have comparable results. We estimate elasticities and pseudo-elasticities in order to compare the magnitude of the effect of the different accessibility variables. In order to measure the accessibility, three types of measures are used:

1. Proximity to transportation infrastructure, which captures the effect of the presence of an infrastructure,
2. Preference for centrality and
3. Potential accessibility indicator, which combines the ease to travel (composite generalised time for trips by Private Vehicle and Public Transportation) and the spatial distribution of the population.

The first and second type of accessibility are easily observable by the firm like proximity or not to a transportation infrastructure or central area or not (de Bok & Van Oort, 2011). The third measure is less intuitive but a more comprehensive indicator of accessibility.

While the majority of previous works are analysing location choices of economic establishments having as alternatives countries (Frenkel, Shefer, Koschatzky, & Walter, 2001), regions (Holl, 2004b) or communes (Manjón-Antolín & Arauzo-Carod, 2011), this work is considering neighbourhood as spatial unit. Knowledge in a such detailed level of analysis can highlight the heterogeneities of location attributes emerging locally (Beaudry & Schiffauerova, 2009; Holl, 2004a).

The main data source is the register of economic establishments (SIRENE database) which is a disaggregated database that contains all the companies in France and it is provided by the INSEE (Institut National de la Statistique et des Etudes Economiques - French National Institute of Statistics and Economics Studies). This database is enriched with other data from various sources (census, modelled data of the LAET laboratory, land value etc). We used the SIRENE database for two time periods, the analysis year of 2011 and the comparison year of 2005. The use of the same database in two time periods permits us to identify the firms created or relocated during this period.

#### **4. Results**

Our results show that location choices of new and relocating establishments differ. However, the observed differences are not the same between all the economic sectors. We can classify the economic sectors in three groups based on the differences for accessibility. In the first group we have the sectors of Manufacturing, Construction and Back Office. These activities have a routine role and they are production oriented. This is why both creations and relocation are indifferent to accessibility to population. In the second group we have the Finance Insurance and & Real Estate and Front Office. These activities are high-order services and require daily face-to-face interaction and information exchange (Shearmur and Alvergne, 2002) and accessibility is important for their activity. In the third group, which is the most heterogeneous, we have the Wholesale, Retail and Health. The economic activity of each of these sectors is highly specific. However, we can observe that creations of these sectors have higher preference for accessibility to population. For the other indicators there is no clear pattern.

The results of this work are very important from a policy perspective. The investments on transportation projects and accessibility improvements are very costly and evidence from this paper shows that local authorities should take into consideration the distinction, not only between economic sectors but between creations and relocations as well. During the economic evaluation of their projects, public authorities should adapt their new policies/projects depending on their objectives (new firms or densification).

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