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Work place location, transport and urban competitiveness: the Oslo case

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Abstract

This paper examines where firms and industries locate in the Oslo region, how this relate to land-use and transport needs and, how the interplay between localisation and transport may have impact on urban competitiveness. It focuses on why some parts of a city region or a city, seems to be more attractive for businesses and people than other parts and, discuss if and how the development can be related to location, proximity and accessibility.

The paper draws on several theoretical approaches and data sources. The analytical framework builds on economic geography, agglomeration and location theory. Data comes from both quantitative and qualitative sources, such as register data on firms and industries, commuting and travel survey data, interviews with industries and policy makers and planners.

The paper discusses some main factors, which may explain the complex relations between urban competitiveness, firm localisation and transport systems. Accessibility and transport system are undoubtedly important for city attractiveness and industrial development and this may vary between industries. An efficient transport system, therefore, is probably necessary but not sufficient for making specific parts of a city attractive for specific industries. Several other location factors related to labour, land, capital, and managerial and technical skills etc., will also shape firm's locations and city attractiveness and competitiveness.

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Keywords: Urban competitiveness, attractiveness, workplace location, transport system

1. Introduction

The Oslo region aims to be an attractive city region for both businesses and people (Florida 2002), and to be an "engine of growth" (Acs 2002) with a particular focus on growth in knowledge industries. The vision in the regional Plan for Innovation is that the Oslo region should become among the most sustainable, smart and innovative regions

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in the world (Regional Innovation Plan 2015). In order to achieve the vision of being both competitive, liveable and sustainable, the city region is eager to upgrade its business environment and skill base (Martin & Simmie 2008). Renewal and improvement of its transport infrastructures is regarded as particularly important for attracting and retaining innovative and profitable firms and industries and a well-educated and creative workforce (Hickman & Banister 2003, Banister 2012). Transport plays an important role in firms' choice of inputs factors and production processes for maximizing profits (production theory) and for their choice of location or re-location (localisation theory). Transport infrastructure will thus affect how and why economic activity develops in different city-regions (Holl 2007). A successful city region will achieve both a high productivity and employment rate, high wages and high GDP per capita (Ratsø 2014).

The paper takes the following research questions as it points of departure:

- How important is the presence of transport hubs for the attractiveness of urban areas when firms search for both competitive and environmental friendly location?
- How does commuting, travel pattern and access to transport systems vary between urban areas in the Oslo region with regard to environmental friendly location?

1.1. Data sources

The paper employs several data sources, both quantitative and qualitative sources, such as register data on firms and industries, commuting and travel survey data, interviews with industries and policy makers and planners.

The Central Register of Establishments and Enterprises (CRE) is the main database for Statistics Norway for all units in Norway with economic activity. The register covers basic variables, such as employees, industry (NACE), localisation and sector, for both enterprises and local activity units from year 2000.

The Norwegian Travel Survey comprises reports from about 60,000 persons nationwide about their travel behaviour, including access to transport, travel mode and distance etc. This survey provides very detailed data for analysis of e.g., commuting, business and shopping travel patterns from the demand side. The survey used was conducted in 2013-2014 (Hjorthol, et al. 2014).

Register based commuting statistics at basic statistical unit (BSU)† level. This is data that shows where all employees reside, at BSU level, and yearly developments in this.

In-depth interviews with enterprises from different industries in selected case areas in the Oslo region.

The paper is mainly based on data collected and analysed as part of a project of the Oslo region, documented in Langeland et al. (2016).

The paper is organised as follows: The analytical framework is presented in section 2. Section 3 includes the empirical findings and analyses. Section 4 concludes the paper.

2. Analytical framework

The analytical framework builds on several theoretical approaches, such as economic geography, agglomeration and location theory. Although there is no consensus on the definition of the concept (Jiang & Shen 2013), regional or urban competitiveness often refers to agglomeration, spatial clustering and specialization. According to Storper (2010) competitiveness reflects the capability of an economy to attract and maintain firms with stable or rising shares in activity, while maintaining stable or increasing standards of living for those who participate in it. This definition emphasizes attraction and retaining of successful firms and high standards of living.

There are several possible advantages related to agglomeration and spatial proximity, such as; shared costs for infrastructure, the build-up of a skilled labour force, transaction efficiency, and knowledge spillovers leading to firm learning and innovation. Location of firms and industries, therefore, is important for urban competitiveness and, transport infrastructure may foster economic development through its ability to nurture agglomeration in related

† "Grunnkrets" in Norwegian, also translated "Census tract level". There are 589 BSUs within the city of Oslo.