

Optimum City Size and the Networks of Individuals

Viroj Jienwatcharamongkhon* and Özge Öner

Jönköping International Business School

Centre for Entrepreneurship and Spatial Economics

Abstract

Previous studies in regional science show that the size of a city has a scaling effect on many variables such as population, economic growth and number of creative employees. This type of relation can also be observed between the size of the networks that emerge between individuals and the cities that are hosting them. These networks are known to emerge within the same industry, as well as across different industries. Alternatively, we propose that the construct of these networks is dependent on the occupations and/or the skills of individuals. However, the city must have an optimal size in relation to the size of a network, taking various spatial and industry specific characteristics into account. Following the decreasing-returns-to-scale argument, we expect a sigmoid curve for different degrees of network-city size relationship. Hence this paper aims to determine the optimal size of a city where an individual would benefit most from a network he/she is a member of. Using geo-coded Swedish micro-data, the paper contributes to the existing literature by analyzing the research question from a micro departure point to draw a macro level conclusion.

Keywords: network, city size, micro-data

JEL: R12, D85

* Corresponding Author

E-Mail: jievir@jibs.hj.se, ozge.oner@jibs.hj.se

Address: P.O. Box 1026 SE-551 11 SWEDEN

Theme: III. Learning Networks for Entrepreneurial and Regional Development