Accepted Manuscript

How market interactions shape the city structure

Nikita Malykhin, Philip Ushchev

PII: S0166-0462(18)30206-0

DOI: 10.1016/j.regsciurbeco.2018.05.006

Reference: REGEC 3371

To appear in: *Regional Science and Urban Economics*

Received Date: 1 May 2016

Revised Date: 24 March 2018

Accepted Date: 29 May 2018

Please cite this article as: Malykhin, N., Ushchev, P., How market interactions shape the city structure, *Regional Science and Urban Economics* (2018), doi: 10.1016/j.regsciurbeco.2018.05.006.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

How market interactions shape the city structure*

Nikita Malykhin† Philip Ushchev‡

Abstract

We develop a spatial monopolistic competition model in which city structure formation is entirely driven by market interactions. When preferences and transport costs are described by real analytic functions, equilibrium land-use patterns are segregated. We completely solve the case of quasilinear quadratic preferences and quadratic transport costs. The city is monocentric when firms are few, duocentric when they are neither too few nor too many, and involves a residential central area bordered by two commercial clusters when firms are many. In the long-run equilibrium, the city size and its spatial structure may change swiftly in response to tiny variations in the opportunity cost of land. Our model captures spatial price dispersion without involving any search frictions.

Keywords: urban structure; love for variety; segregated spatial equilibrium; price dispersion.

JEL classification: R12, R14, D43, L13

ACCEPTED MANUSCRIPT

*We owe many thanks to the editor and two anonymous referees for their insightful comments. We are also grateful to Kristian Behrens, Thomas Holmes, Konstantin Kholodilin, Sergey Kokovin, Artem Korzhenevych, Yasusada Murata, Jos van Ommeren, Qin Xiao, and especially Hans Koster, Jacques Thisse, and (posthumously) Evgeniy Zhelobodko for very useful discussions. The study has been funded by the Russian Academic Excellence Project '5-100'. The usual disclaimer applies.

†CEU, Budapest, Hungary. Email: nikmalykhin@gmail.com

‡National Research University Higher School of Economics, Russian Federation. E-mail: fuschev@hse.ru

Download English Version:

https://daneshyari.com/en/article/7383615

Download Persian Version:

https://daneshyari.com/article/7383615

Daneshyari.com