

Author's Accepted Manuscript

Location equilibria for a continuous competitive facility location problem under delivered pricing

José Fernández, Said Salhi, Boglárka G. -Tóth



www.elsevier.com/locate/caor

PII: S0305-0548(13)00210-4
DOI: <http://dx.doi.org/10.1016/j.cor.2013.08.004>
Reference: CAOR3391

To appear in: *Computers & Operations Research*

Cite this article as: José Fernández, Said Salhi, Boglárka G. -Tóth, Location equilibria for a continuous competitive facility location problem under delivered pricing, *Computers & Operations Research*, <http://dx.doi.org/10.1016/j.cor.2013.08.004>

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 galley proof before it is published in its final citable 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.

Location equilibria for a continuous competitive facility location problem under delivered pricing [☆]

José Fernández*

Department of Statistics and Operations Research, Faculty of Mathematics, University of Murcia, Campus de Espinardo, 30100 Espinardo, Murcia, Spain

Said Salhi*

Centre for Logistics & Heuristic Optimization, Kent Business School, University of Kent, Canterbury CT2 7PE, United Kingdom

Boglárka G.-Tóth*

Department of Differential Equations, Budapest University of Technology and Economics, Budapest, Hungary

Abstract

The problem of finding location equilibria of a location-price game where firms first select their locations and then set delivered prices in order to maximize their profits is investigated. Assuming that firms set the equilibrium prices in the second stage, the game can be reduced to a location game for which a global minimizer of the social cost is a location equilibrium, provided that the demand is completely inelastic and the marginal production cost is constant. When the set of feasible locations is a region of the plane the minimization of the social cost becomes a hard-to-solve global optimization

[☆]This research has been supported by the Ministry of Economy and Competitiveness of Spain under the research project ECO2011-24927, in part financed by the European Regional Development Fund (ERDF), and the Fundación Séneca (The Agency of Science and Technology of the Region of Murcia) under the research project 15254/PI/10, and also by the Algerian Ministry of Education (Sciences Fondamentales), under research project PNR 8/U160/64.

*Corresponding author

Email addresses: josefdez@um.es (José Fernández), S.Salhi@kent.ac.uk (Said Salhi), bog@math.bme.hu (Boglárka G.-Tóth)

URL: <http://www.um.es/geloca/gio/josemain.html> (José Fernández)

Download English Version:

<https://daneshyari.com/en/article/6893025>

Download Persian Version:

<https://daneshyari.com/article/6893025>

[Daneshyari.com](https://daneshyari.com)