

## **Where to Locate in a Circular City with a Foreign Market?**

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### **ABSTRACT**

This study considers a spatial Cournot competition between duopoly firms in a circular market with an exporting point connected to a foreign market. It is shown that the relative size of the foreign market is crucial in determining the location equilibrium. Specifically, when the foreign market is small, there exists a separated location equilibrium. As the foreign market size increases, the separated equilibrium locations move closer to the exporting point. When the foreign market size is relatively large, both firms agglomerate at the exporting point. Our results are robust in the case of mixed duopoly. Moreover, the equilibrium locations are either farther apart or closer to each other than the socially optimal locations for the domestic country. In addition, we explore several extensions such as two circular markets, export subsidies, and the competition between a domestic firm and a foreign firm. Finally, implications for investment promotion are also provided.

**Key Words:** locations, spatial Cournot model, circular market, export subsidies, foreign market

# 與外國市場相連的圓形市場之 雙占區位選擇

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## 摘 要

本研究分析雙占廠商在一個具有出口點與外國市場相連的圓形市場進行數量競爭的問題。我們證明外國市場的相對大小對於廠商區位選擇具有決定性的影響。當外國市場很小時，存在一個分離的區位均衡。隨著外國市場的增大，分離的均衡區位會逐漸向出口點靠近。當外國市場很大時，兩廠商會聚集在出口點。我們的結果在混合雙占的情況下仍然適用。此外，均衡區位有可能比社會最適區位更靠近或更遠離。另外，我們也延伸探討了兩個圓形市場、出口補貼，及一家國內廠商與一家國外廠商的競爭等情境，最後我們提供了招商投資的相關經濟意涵。

關鍵字：區位、空間 Cournot 模型、圓形市場、出口補貼、外國市場