

Empirical Study of Homogeneous Retailer Agglomeration¹

By Robert E. Krider, Daniel Putler, Tirtha Dhar & Jose Mora

Abstract

Automobile dealerships, electronics shops, and bridal boutiques, all selling similar products, often locate close to each other, in spite the anticipation of increased price competition from nearby competitors. Much theoretical research has been done in spatial economics to explain homogeneous retail agglomeration, and many different reasons have been proposed. These include reduction in consumer search costs when there is uncertainty in prices, assortment, or the consumer's own tastes; increase market areas resulting from consumer expectations of price competition or greater assortment; and firms desiring to reduce their own uncertainty in location choice by locating close to similar successful forms. Very little empirical work explores the types of retailers that actually do tend to agglomerate with their direct competitors, nor is there much research that empirically tests the many theories of homogeneous agglomeration.

Using a database of more than twenty thousand retailers in Vancouver, we develop a Geographical Information System that allows us to select subsets of retailers on the basis of SIC codes, and assess the degree of clustering using spatial entropy measures. By linking the SIC code with retail format characteristics, especially the nature of the products sold, and descriptive measures for each retailer, we are able to explore the characteristics of retailers that have led to spatial clustering of similar formats. We also explore how the details of the location clusters, such as the size distribution of the clusters, vary with format.

¹ June 2007: Paper presented at the INFORMS Marketing Science Conference. Singapore.