Location analysis of retail stores in Japanese urban area in terms of type of management

Nobuhiko Komaki[1]

[1] Life and Environmental Sciences, Univ. of Tsukuba

http://giswin.geo.tsukuba.ac.jp/sis/

1. Introduction

Recently, type of management is one of the keywords on studies of the retail trade in Japan. Heretofore, types of industry usually have been used when researchers classify stores. However, the classification by not type of industry but management comes to attract attention. Arai and Hashimoto (2004) compared the number of stores and annual sales by type of management between in 1994 and 2000. While number of GMS, specialized supermarkets, and convenience stores showed the upward tendency, it was shown that number of department stores, and medium size specialized supermarkets and a specialized stores were decline. They said that the trend has shifted from a type of industry to type of management. However, a location tendency changes with type of management and areas like metropolitan area and local region. The purpose of this study is to show the location tendency of type of management and its regional difference.

2. Research method

In analysis, 113 'Metropolitan Employment Areas (MEA)' defined by Kanamoto and Tokuoka (2001) were used as unit of analysis and the relation between number of shops and population was found. However, if the total number of shops and population in MEA were used as indices, the spatial location characteristics could not be shown. Then, mesh data provided in Japan is used. In addition, 9 types of management (department store, GMS, clothing supermarket, food supermarket, furnishing supermarket, home center, convenience store, drugstore, and specialized store) were analyzed.

First, 'Location Population Index (LPI)' was computed by the average population of the mesh located for every types of management and compared for every types of management. Next, 'Types of Management Index (TMI)' was computed by LPI of each types of management was standardized by LPI of all types of management and compared between MEA.

3. Result

Department store showed the highest LPI (5,248.2) in all MEAs, and second is drugstore (4,103.2), third is specialized store (4,063.8). Meanwhile, Home center showed the lowest LPI (3,215.6), and second is convenient store (3,589.2), third is clothing supermarket (3,671.0).

In addition, when TMI was compared between MEAs, the spatial difference was. Department store and GMS were in the tendency for TMI to become high in the local region. In contrast, TMI of drugstore was high also in a metropolitan area. Mean-while, specialized stores, convenience stores and home center showed that the difference of variance of TMI between MEAs was small.

4. References

Arai, Y. and Hashimoto, K. 2004. *Nihon no Ryutsu to Toshi Kukan (Japanese distribution system and urban structure)*, Tokyo: Kokon-shoin. (J)

Kanemoto, Y. and Tokuoka, K. 2001. Metropolitan Area Definitions in Japan. CSIS discussion paper 37.