ABSTRACT

The Definition of Metropolitan Areas in Japan And Analyses relating to them

Toru KURAHASHI
Professor, Dokkyo University Faculty of Economics
Visiting Research Fellow, Policy Research Institute, Ministry of Land, Infrastructure, Transport and Tourism, Japanese Government

In Japan, the definition of metropolitan areas has not been taken hold. Officially, Statistics Bureau, Ministry of Internal Affairs and Communications have defined Major Metropolitan Areas and Metropolitan Areas in Population Censuses. Also, “Urban and Regional Report 2005” by Ministry of Land, Infrastructure, Transport and Tourism defined Metropolitan Areas. In the field of academics, Kanemoto and Tokuoka(2002) defined Urban Employment Area and the data of the area have been provided by Center for Spatial Information Science, the University of Tokyo.

Each area consists of core city or core cities and surrounding municipalities, although the area differs depending on the definition. Each definition and data provision has merits and shortcomings. The area defined by Statistics Bureau changes once a city added by the Cabinet Order. The data of the area defined by Ministry of Land, Infrastructure, Transport and Tourism have provided only once. The Urban Employment Area is very strict and scientific concept and needs iterations for definition. However, recent data have not been provided.

Then two analyses using Urban Employment Area (UEA) data are introduced. The first is the one relating to productivity of public infrastructure conducted by Policy Research Institute, Ministry of Land, Infrastructure, Transport and Tourism. UEAs are divided into Metropolitan Employment Areas and Micropolitan Employment Areas and panel data analyses are conducted for each of them. Elasticity and marginal productivity is estimated using Cobb-Douglas production function for total public infrastructure, production field (trunk roads, airports etc.), welfare field (parks, sewerage etc), disaster prevention field, agriculture field, and others.

The second is about the between concentration to Tokyo Metropolitan Area among Japan and concentration to Sapporo(Sapporo-Otaru) Metropolitan Area among Hokkaido Prefecture. Sapporo is well known as branch economy. Many big businesses in Japan have branch offices in Sapporo Area as a center for Hokkaido. Thus, concentration to Sapporo should have relationship with concentration Tokyo.