Abstract

In this research economic gravitation theory was liberated from newtonian contents. Constante of a and b in the economic gravitation index formula assumed to be 1. Economic mass was obtained from income time total population or obtained from income per capita. Then, economic mass for 2 regions was obtained from the sum of each region economic mass. If this is true, there would be relationship between economic gravitation index with economic growth.

To examine the relationship, dynamic LSDV econometric equation was prepared. In this LSDV, explanatory variable was added with economic growth a year before year t (G_{t-1}). Then, this dynamic LSDV was applied to 11 regions that each others had a regional borders in Surakarta Residency from 2001 to 2005. The variable of total population was approached by subdistricts population in the region that had a regional borders with other region. Indexing was done by simple indexing with 2001 Sukoharjo-Surakarta economic gravitation coefficient as a base. Variable for economic growth was choosen between economic growth of two regions that had economic gravitation. The criteria to choose is the highest economic growth of the two regions.

The results show that dynamic LSDV econometric equation could significantly explain relationship between economic gravitation index that was liberated from newtonian contents with economic growth in 5 regions that had a regional borders, if using multiplication between income to population to estimate economic gravitation index, and in 6 regions that had a regional border, if using income per capita. The relationship between economic gravitation Index with economic growth, however, were very small and even in few cases had negative signs.

Keywords: Economic Gravitation, Newtonian and Growth