GDP MODELING OF AGRICULTURE, INDUSTRY, AND TRADING, HOTEL, AND RESTAURANT SECTOR EAST JAVA PROVINCE WITH SPATIAL PANEL ECONOMETRICS APPROACH

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Abstract
Common indicators used to determine a region’s economic growth is the Gross Regional Domestic Product (GDP) of a region. The main sectors of the East Java economy is Trade, Hotels and Restaurants (PHR) sector, Industry sector, and Agricultural Sector. This research focuses on econometric modeling of regional GDP to spatial panel approach that is expected to explain the effects of spatial and time period effects on the value of the three main sectors of GDP in each of the districts / cities in East Java. Factors which support the agricultural sector is the agricultural labor, capital expenditure, and goods and services expenditure. Factors which support the industrial sector is labor industrial, capital expenditures, goods and services expenditures and personnel expenditure. Factors which support the PHR sector is labor PHR, capital expenditures, and personnel expenditure. The best model for the agricultural GDP is SEM Random Effect. While the best model for industrial GDP and PHR GDP is SAR Random Effect. Spatial autoregressive coefficient on the industrial and PHR models, respectively 0.648986 and 0.871969. The most elastic factor in the industrial and PHR sector is personnel expenditure amounted to 0.00509% and 0.00527%.

Key word : GDP, Panel, Spatial