

## ABSTRACT

*This research aims to analyze the determinants of district/city economic growth and the spillover effect of the city of Medan in the North Sumatra region in 2014-2018. This research uses several other variables to control economic growth. These variables are the Human Development Index (HDI), investment, labor and distance. This research also uses three analytical methods, the first is panel data regression analysis. The results of this research show that the HDI and investment variables have a significant effect and have a positive impact on economic growth, while the labor variable does not have a significant effect but has a positive impact on economic growth, and the distance variable has a significant effect but has a negative impact on economic growth. The second analysis, namely the gravity model analysis, shows the results that the areas that have high interaction with Medan City as the center of growth are Asahan Regency and Langkat Regency. Meanwhile, the area that has the lowest interaction is Tanjung Balai City. Furthermore, the spatial analysis shows the results of the HDI variable, investment has a significant influence and has a negative impact on the spillover effect, while the labor and distance variables have a significant positive influence on the spillover effect.*

**Key words:** *economic growth, spillover effect, Human Development Index (HDI), investment, labor, distance, gravity model, spatial econometrics.*