Abstract

This study presents the delineation of urban areas and estimates the magnitudes of agglomeration economies in Indonesia. It starts from offering a new definition of an urban area in Indonesia based on a functional approach. There are 83 urban areas identified from this process. These urban areas play an important role in Indonesia's economy as their economic share is substantial at 61 percent in 2010. They represent only 4.7 percent of the land area of Indonesia, but these urban areas are home of 52 percent of the country's population. The concentration of manufacturing workers is significant in those urban areas at 75 percentage level. This condition reflects a transformation of this country to become an industrialized economy that driven by the productivity in urban areas.

The second part of this study examines agglomeration economies in urban areas in Indonesia from the productivity perspective. The empirical estimation addresses the endogeneity in workers' quantity and workers' quality. The agglomeration externalities in Java urban areas are statistically significant and range between 2 and 3 percent. The market potential is also a significant determinant of wages in Java urban areas. The elasticity of wages with respect to market potential ranges between 24 percent and 25 percent. However, the effect of employment density and market potential are not significant to the productivity on urban areas outside Java.

The last part of this study focuses on the consumption side of agglomeration economies in Java metropolitan areas. The main feature of this empirical study is the application of micro-level estimation at household level. This micro-level assessment enables us to control for the house characteristics in estimating the net agglomeration values. The results suggest that the elasticity for agglomeration ranges from 12 to 14 percent in Java metropolitan areas. The local infrastructure is also statistically significant to the consumption values with an elasticity that ranges between 5.3 percent and 6 percent. Among local infrastructures, the road network has the highest consumption values in Java metropolitan areas.