
Abstract

This study aims to analyze the effects of industrial parks on firm performances in Gyeonggi-do. The effects are measured in terms of employment growth rate, total factor productivity and the number of patents.

As of 2019, industrial parks in Gyeonggi-do house 28,830 businesses and 495,622 employees, which corresponds to 4.2% and 10.69% of the total number of businesses and employees in Gyeonggi-do. However, the proportion of industrial parks in the local economy is relatively low in northern Gyeonggi Province: only 1.49% of all businesses and 6.1% of workers are located in industrial parks. To compensate for the shortcomings of individual locations, maintenance and expansion of common infrastructure is urgently needed.

By analyzing a DID model using national business survey data(2013 ~2019), moving into an industrial park leads to the increase in tenant firm's employment growth rate. However, the effect is more like temporary business expansion rather than fundamental growth due to the creation of agglomeration externality. The effect of industrial parks on tenant firm's productivity is in negative direction. Potential interpretations are as follows: i) The degree of freedom in site selection is lower than the cases of individual location. ii) It is difficult to reflect the firms' locational demand (e.g. access to human capital, improvement of cooperative networks). iii) Tenant firms might experience the decrease in investment capacity for the human capital and R&D sectors. In order to offset these types of opportunity costs and enhance the benefit from relocation into an industrial park, it is necessary to spread

knowledge and increase innovation opportunities through inter-firm interaction.

The effect of industrial parks on firm's inovational performance is assessed using negative binomial estimation. It turns out that the relocation into an industrial park does not lead to the growth in the firm's innovation performance represented by the number of patent applications. Particularly in Gyeonggi-do, the antecedent correlation between the frequency of patent applications and occupancy in industrial complexes does not appear in any direction. It can be seen that companies with high potential for innovation do not prefer to move into industrial parks.

Policy implications from these findings are as follows. First, it is important to target firms that are expected to create synergetic effects through cooperation with other tenants in the park. Second, software support for tenant firms is required. While it is difficult for the development agency to provide follow-up management for tenant companies, in-depth support for tenant firms can be provided by establishing specialized organization under the management of the municipality. Third, it is important to create an environment where it is easy to attract excellent companies and manpower. Development of complex parks with a pleasant working environment is needed to attract potential employees and tenant firms.

Keyword

Industrial parks in Gyeonggi-do, Performances of tenant firms, Employment growth rate, Total factor productivity (TFP), Patent