Municipal economics of regional development – infill versus greenfield development

There is an ongoing debate in academia about the pros and cons of infill development. It has been said that dense city structure can lead to several agglomeration benefits and cost savings, whereas urban sprawl is usually seen as a negative phenomenon supporting an unsustainable lifestyle and leading to increasing municipal expenditures. Contrastive perspectives can also be found. Some studies claim that limiting the land available to build on is raising the prices in housing markets resulting in various problems. It is also alleged that the economic benefits gained through densifying are diminished in cities with a population over 500 000.

In this case study, the analysis is limited strictly to the financial aspects of regional development projects. The main difference when comparing this study to the existing body of literature is that the municipal revenues are considered alongside the expenditures instead of focusing solely on the cost aspects. The net Present Value method is used to analyze three different regional development projects. An ongoing greenfield residential area development project is compared with two infill development projects in the city of Tampere in Finland. The first infill area is situated in the immediate vicinity of the city center and the second is a suburb about eight kilometers west from downtown Tampere. The analysis provides information not only about differences between infill and greenfield projects, but also about the dissimilarities between different types of infill.

The results indicate that from the perspective of municipal economics, residential infill is more profitable when compared to greenfield development. Two studied infill areas start returning profits 25–30 years after the start of the development, whereas for the studied greenfield project the corresponding value is almost 50 years. Despite the undeniable economic benefits, the practice shows that there are still major obstacles preventing the widespread realization of infill in Finland.
The status of socioeconomic segregation was investigated in Helsinki Metropolitan Area, City of Tampere, and City of Turku. Furthermore, the existence of statistically significant associations between changes in housing and building stock, and development of socioeconomic segregation was examined. The empirical analysis was performed in three separate phases, including spatial analysis, estimations of logit models, and finally, OLS estimations of regression models. The data was collected from grid-based monitoring system for spatial structure and urban form (YKR), spanning from 2000 to 2012. The size of one grid cell was 250 x 250 meters. For further analysis, the grid data was merged with a dataset containing locations and basic information on housing developments subsidized by the Housing Finance and Development Center of Finland (ARA).

It was found that the relative number of people living in socioeconomically segregated grid cells had increased in all areas during the study period. However, at the same time the boundary values for lower and upper quintiles of the variables indicating the status of socioeconomic segregation differentiated relatively little in the study period. Furthermore, statistically significant associations between changes in building stock and socioeconomic segregation were observed. Property types and housing tenures located in the grid cells were also found to be associated with the socioeconomic status of people living in those areas.
The impact of residential development on nearby housing prices

Purpose - Even as multi-story apartment building development proposals in existing neighbourhoods represent a substantial component of policy debate at local planning boards, there is limited evidence for the impact of such residential developments on surrounding apartment values. The void in knowledge is addressed in this study, and the impact of multi-story apartment building developments on apartment values in residential high-rise areas located outside city and district centres is investigated in Helsinki Metropolitan Area, Finland.

Design/methodology/approach - Whether a multi-story apartment building development is followed by an increase in housing values depends on both positive and negative externalities. To specify valuation effects of proximate development projects, advanced research design combining matched sample methodology and hedonic-based difference-in-difference approach is used.

Findings It appears from the analysis that completion of a single multi-story apartment building has an immediate positive impact on apartment values within 300 metre radius. While, there is no statistically significant impact on price trend.

Research limitations - This paper studies apartment values only in Helsinki Metropolitan Area, Finland, and it is important to notice that local regulations and market conditions may have a notable impact on the outcomes.

Originality/value This study is the first of its kind to provide with statistically significant evidence for positive impacts from multi-story apartment building development in Finnish residential high-rise areas, and may have a crucial role in helping to dispel prejudices related to such developments.
The impact of senior house developments on surrounding residential property values

Purpose - Even as many countries are facing changes in demographic profile and new types of senior housing developments are becoming more important, there is limited evidence for the development impact of a senior house on surrounding residential property values. This study addresses the void in knowledge, investigating the impact of senior house developments on apartment values in Tampere, Finland.

Design/methodology/approach - To specify valuation effects of proximate senior house development projects, advanced research design combining propensity-score matching procedure and hedonic pricing models is used.

Findings - The results show that a senior house development has a significant positive impact on proximate residential property values within a 500 metre radius. The impact is found to be the highest in underdeveloped neighbourhoods. Nevertheless, in neighbourhoods where property values and demand for housing units are higher and senior house developments fall into the criteria of infill development, a premium is lower, but still statistically significant and notable in magnitude.

Research limitations - This paper studies apartment values only in Tampere, Finland, and it is important to notice that local regulations and market conditions may have a notable impact on the outcomes from senior house developments.

Originality/value - This study is the first of its kind to address a number of empirical issues and provide with statistically significant evidence for positive impacts from senior house developments – encouraging investors and developers to build senior houses.

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