Ask: NUS Economists

The impact of crowdedness on housing prices

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6 Disadvantages of more crowded apartments as a luxury?
A Singapore population is crowded whereas rental housing is less crowded. How do people live in smaller apartments?

To answer this question, we estimated the economic impact of crowdedness on housing prices using a hedonic regression analysis. We used apartment size, floor number, number of years rented and project facilities as key variables. To control for differences in crowdiness, we accounted for the number of square metres per apartment area size in our analysis. Additionally, we controlled for differences in urban density by accounting for other characteristics that also affect housing prices.

We estimated a wide range of characteristics in the regression analysis, such as apartment size, floor number, lease year, remaining, and project facilities, in order to determine any bias in our results. Additionally, we controlled for differences in the neighborhood and amenities by adjusting for amenities in the regression analysis. In all, we studied 11,725 transactions from 2017 January to 2018.

We found that an increase in localised density negatively affected housing prices: a one per cent increase in density caused a decrease in price per square foot by about 8.2 per cent.

Let’s consider an example. Holland Residences and Parc 8 are two adjacent projects near Holland Village. Holland Residences contains 896 apartments on 7.1 acres of land, for an average of 148 apartments per acre. Parc 8 contains 654 apartments on 29 acres of land, for an average of 44 apartments per acre.

In other words, Holland Residences has 10.2 per cent more apartments per acre than Parc 8 and is relatively more crowded. The findings suggested that an apartment in the denser Holland Residences sold for approximately 2 per cent less per square foot than a similar apartment in Parc 8. Since people were paying less for a similar apartment in the more crowded Holland Residences, the Holland Residences must have lower housing prices per square foot.

Our study suggests that crowdedness negatively impacts housing prices by 8.2 per cent per square foot. Since the average size of an apartment in Holland Residences is 1,234 sq ft, the total effect of density means that the total price of an apartment in Holland Residences is likely to be $20,000 less than a similar apartment in Parc 8.

Our findings show that crowdedness has a significant impact on housing prices. The total effect of density on housing prices is highly significant. A one per cent increase in density causes a decrease in price per square foot of about 8.2 per cent.

An increase in localised density negatively affected prices: a 10 per cent increase in density caused a decrease in price per square foot by about 2 per cent.