

How School Proximity Affects House Prices

Singapore parents will go to great lengths to get their children into popular schools. Primary 1 registration begins in the second half of each year.

The Ministry of Education's allocation system consists of seven phases. The first three phases - 1, 2A(1) and 2A(2) - assign priority to students affiliated with schools, which include children with siblings currently studying in the schools, whose parents and siblings are alumni of the schools, whose parents are members of advisory and management boards of the schools, or whose parents are teaching staff in the schools.

Prioritisation based on the distance between a child's home and the primary school is used in the next two phases known as 2B and 2C.

The distance-based rules assign places sequentially to children living within a 1km radius of the school, followed by children living between 1km and 2km from the school. If there are more children living between the 1km and 2km boundary than available places, balloting is conducted to assign places in these two phases.

In a study jointly conducted with two other researchers at the National University of Singapore (NUS), Dr Satyanarain Rengarajan and Miss Yang Yang, a PhD student at the Department of Real Estate, we tested the extent to which distance-based school allocation rules influence families' home-buying decisions.

In this study, we used 16 primary school relocation events between 1999 and 2009 in Singapore to test the effects of school relocation on housing prices.

Our main results showed that such events caused significant price declines of 2.9 per cent for private non-landed houses located within 1km of the old school relative to comparable houses located outside the 2km zone, in the six months before the actual move.

Larger price declines of 5.5 per cent and 6.9 per cent associated with the loss of a school are found for houses located 1km and 1km to 2km from the school locations 12 months before the actual relocation.

In the public housing market, we also found that school relocations cause significant but smaller losses of between 0.7 per cent and 1.4 per cent for house prices within the 1km school zone.

The effects were amplified in the areas affected by relocations of popular primary schools in the top 50 ranking, based on the excess subscription rate in Phase 2C and academic performance.

In the private housing market, the loss of a top 50-ranked school caused housing prices to decline by 8.5 per cent and 12.2 per cent for the 1km and 1km to 2km school zones, respectively.

The comparable declines in public housing prices are estimated at 5.1 per cent and 2.4 per cent for the 1km and 1km to 2km old school zone, respectively.

We found that the prioritisation rule as represented by the 1km school zone is more relevant in the private housing market than in the public housing market.

We also find that in more densely built Housing Board estates, families living within 200m from the schools are more likely to be affected by negative externalities associated with school noise and congestion.

We also tested the effect of a school's move on house prices in the new school location, and found that such re-sitings increase both HDB and private housing prices in the new school zones after six months of the relocation.

The findings of our study confirm that homes located within a 2km radius of popular primary schools command large price premiums. Singapore is not the only country where such price discrepancies exist.

In Beijing, China, a study found a premium of 7.2 per cent for houses located within the attendance zone of key primary schools.

The phenomenon is also not unique to Asian societies; there is evidence showing that families pay higher prices for houses located within school attendance zones in the United States, Canada, Britain and France.

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