Previous Studies on Physical Determinants of Housing Price

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Density Effects

Housing Quality Effects


Environment Effects


Transportation Effects


Density Effects

the study has found that there is an optimal development scale of housing estate and the number of dwelling units is estimated to be in the range of about 1130 (equivalent to about 9210 m² of housing site area).
Housing Quality Effects

Value of Healthy Building Parameters

- Orientation
- View
- Height
- Facing Road
- Balcony
- Headroom
- Size
- Cross Ventilation

- Ventilation, Thermal & lighting
- Colour
- Noise
- Space & Design

Health and Comfort

Branding Effects

The market has efficiently adjusted the forward price for this potential quality problem according to developers’ reputations.
Balcony Value

A balcony has a value enhancement effect on high-rise residential properties, regardless of the view outside. It also helps to mitigate adverse environmental impacts, such as noise and air pollution and their effects on property values.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 3: log-squared model</th>
<th>Coefficient</th>
<th>t-statistic</th>
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</thead>
<tbody>
<tr>
<td>Constant</td>
<td>$A_0$</td>
<td>4.363803</td>
<td>0.720230</td>
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<tr>
<td>Ln(AGE)</td>
<td>$a_1$</td>
<td>7.471025</td>
<td>2.446931**</td>
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<tr>
<td>Ln²(AGE)</td>
<td>$b_1$</td>
<td>-1.183176</td>
<td>-2.525497**</td>
</tr>
<tr>
<td>Ln(FLR)</td>
<td>$a_2$</td>
<td>0.199095</td>
<td>4.543086*</td>
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<tr>
<td>Ln²(FLR)</td>
<td>$b_2$</td>
<td>-0.040978</td>
<td>-3.714192*</td>
</tr>
<tr>
<td>Ln(SIZE)</td>
<td>$a_3$</td>
<td>-3.652725</td>
<td>-3.473075*</td>
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<tr>
<td>Ln²(SIZE)</td>
<td>$b_3$</td>
<td>0.359308</td>
<td>4.482257*</td>
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<tr>
<td>LVB</td>
<td>$a_4$</td>
<td>0.118134</td>
<td>2.944791*</td>
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<td>BAL</td>
<td>$a_5$</td>
<td>0.041154</td>
<td>2.679657*</td>
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<td>RD</td>
<td>$a_6$</td>
<td>-0.098737</td>
<td>-4.615144*</td>
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<tr>
<td>RB</td>
<td>$a_7$</td>
<td>-0.032705</td>
<td>-0.967173</td>
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</table>

Adjusted $R^2$ 0.769139
No. of observations 859
Dependent variable Ln(RP)

Note: * Significant at the 1 percent level; ** Significant at the 5 percent level

## Value of View

Dependent Variable: $\ln (PRICE/GFA)$
Method: Least Squares
White Heteroskedasticity-Consistent Standard Errors & Covariance

Included observations: 819  
(JUL 1969 – DEC 1972)  
Before Reclamation

<table>
<thead>
<tr>
<th>Variable</th>
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<tbody>
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<td>SV_S</td>
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<td>0.0287</td>
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<tr>
<td>SV_W</td>
<td>0.0539</td>
<td>0.0469</td>
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</table>

Included observations: 2407  
(JAN 1998 – DEC 2000)  
After Reclamation

<table>
<thead>
<tr>
<th>Variable</th>
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<th>Prob.</th>
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</thead>
<tbody>
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<td>0.0000</td>
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<tr>
<td>SV_W</td>
<td>0.0662</td>
<td>0.0002</td>
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</tbody>
</table>

+ve garden view premium after reclamation?!
Transportation Effects

there were positive price expectation effects well before the completion of the tunnel.

Figure 5. Price gradients between Zone 1 and Zone 6.

http://usj.sagepub.com/content/42/1/113.refs
Transportation Effect on Housing Price Gradient

Fig. 1. The change in price gradient when $f_2$ increases and $f_1 > f_2$ at time $t=0$. 

New Project 1 Plan: Extension of MTR Line

• The Extension of MTR Line to Kennedy Town is said to achieve social inclusion by enhancing accessibility of low-income households at the fringe of the city centre;
• But the increase in housing rent after the completion of the extension line is found to be much more than the average of the territory. It is a kind of economic exclusion.
• Is it a social inclusion or an economic exclusion is the focus of the study.
New Project 2 Plan: Open Kitchen Design Effect?

• Very few studies so far on open kitchen effect on housing price, esp in HK.
  – Lau et al. (2006) “… there are two new trends in young working families: one that favours open-plan kitchen and another that favours separate kitchens.” (JoBA, 223-239)

• Probably it is because the Buildings Ordinance (its practice notes) has been amended for a few years, and it is still relatively new.
New Changes on Fire Safety for Open Kitchen Design

• A new clause (C13.4) in the Fire Safety Code (BD, 2011) is added:
  – Smoke detectors are required
  – Sprinkler head is required
  – Shielding wall is required
  – Fire safety of the building is enhanced?! 

• Chow (2011) Fire Safety Concern on Open Kitchen in Small Residential Units of Tall Buildings, IJoEPBFC
The End

comments are welcome.
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