How does abolishment of rent control affect returns on residential investments in the long run?

Sviatlana Engerstam
My research

Price dynamics in housing markets in the long-run

• What are the factors that affect house prices?
• What lead to bubbles? How to avoid them?
• How to make markets more stable in the long-run?

This study is looking on housing markets from investor prospective, i.e. main focus is on directly owned rental properties and impact of rent control on return.
Housing prices in Sweden

Index, January 2005 = 100

Note. Seasonally-adjusted housing prices.

Sources: Valueguard and the Riksbank
Housing price growth in Sweden

Per cent

![Graph showing housing price growth in Sweden from 2006 to 2017. The graph includes yearly change and annualized monthly change, seasonally adjusted.]

Note. Annual change and monthly change adjusted to annual growth rate.

Source: Valueguard and the Riksbank
Aim

The aim is to analyze the effects of abolishment of rent control in housing market on residential returns and investments in the long run.

2 case countries:
Sweden- rent control since
Finland – rent control since 1974, abolished since 1995.

Data for 2000-2015:
• 3 major urban areas in Sweden
• 6 major urban areas in Finland
Previous studies – Literature review

Fallis and Smith (1984) – rent control in the controlled sector of the market cause the rents on uncontrolled sector to exceed the equilibrium rents in the absence of rent controls.

Hirs (1988) – rental values in case of rent control are significantly lower on comparison with the rental values in uncontrolled segments of the market.

Sims (2007) – elimination of rent control has led to substantial rent increases and increases in quantity of rental housing available.

Author et al (2014) – when rent control ends, there is a direct effect of price increase and indirect effect that landlords invest in additional maintenance.
Theoretical model – Rent control (Sweden)

Proposition 1: Capital return is higher in rent controlled market
Theoretical model – Market rent (Finland)

Proposition 1: *Income return is higher without rent control*
Return on residential properties
Sweden 2000-2015

Capital return and Income return chart for the years 2000 to 2015.
Return on residential properties
Finland 2000-2015

Capital growth
Income return
# Return on residential properties, 2000-2015

**Sweden**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>St.dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income return, %</td>
<td>4,0</td>
<td>0,7</td>
</tr>
<tr>
<td>Capital return, %</td>
<td>6,1</td>
<td>4,5</td>
</tr>
<tr>
<td>Total return, %</td>
<td>10,3</td>
<td>4,9</td>
</tr>
</tbody>
</table>

Source: MSCI Property databank Sweden

**Finland**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>St.dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income return, %</td>
<td>5,7</td>
<td>0,3</td>
</tr>
<tr>
<td>Capital return, %</td>
<td>2,8</td>
<td>1,7</td>
</tr>
<tr>
<td>Total return, %</td>
<td>8,5</td>
<td>1,8</td>
</tr>
</tbody>
</table>

Source: KTI Property databank Finland
Model – country level

Y = a + b1*X1 + b2*X2 + b3*X3 + b4*X4 + u

where:
Y - return (income, capital or total return)
X1 - Income per capita change
X2 - Population growth
X3 - Dwelling stock change
X4 - Lending interest rate
u - error term
## Results

### Sweden

<table>
<thead>
<tr>
<th></th>
<th>Income return</th>
<th>Capital return</th>
<th>Total return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>5,51</td>
<td>16,17</td>
<td>22,3</td>
</tr>
<tr>
<td>Income per capita growth</td>
<td></td>
<td>0,83</td>
<td>0,86</td>
</tr>
<tr>
<td>Population growth</td>
<td>-2,34</td>
<td>-11,99</td>
<td>-14,86</td>
</tr>
<tr>
<td>Dwelling stock change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lending interest rate</td>
<td></td>
<td>-2,02</td>
<td>-2,1</td>
</tr>
<tr>
<td>R-squared</td>
<td>0,68</td>
<td>0,83</td>
<td>0,83</td>
</tr>
</tbody>
</table>

### Finland

<table>
<thead>
<tr>
<th></th>
<th>Income return</th>
<th>Capital return</th>
<th>Total return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>5,92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income per capita growth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population growth</td>
<td>1,21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwelling stock change</td>
<td>-0,78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lending interest rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0,84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significance at 95%*
Model with dummy variable for rent control

\[ Y = a + b_1 \times X_1 + b_2 \times X_2 + b_3 \times X_3 + b_4 \times X_4 + b_5 \times X_5 + u \]

where:
- \( Y \): return (income, capital or total return)
- \( X_1 \): Income per capita change
- \( X_2 \): Population growth
- \( X_3 \): Dwelling stock change
- \( X_4 \): Lending interest rate
- \( X_5 \): Dummy for rent control
- \( u \): error term
## Result - Rent control impact

<table>
<thead>
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<th>Income return</th>
<th>Capital return</th>
<th>Total return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>6,91</td>
<td>7,49</td>
<td>14,59</td>
</tr>
<tr>
<td>Income per capita growth</td>
<td>-</td>
<td>0,68</td>
<td>0,69</td>
</tr>
<tr>
<td>Population growth</td>
<td>-1,15</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dwelling stock change</td>
<td>-0,9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lending interest rate</td>
<td>-</td>
<td>-1,15</td>
<td>-1,15</td>
</tr>
<tr>
<td>Rent control</td>
<td>-1,56</td>
<td>4,72</td>
<td>3,48</td>
</tr>
<tr>
<td>R-squared</td>
<td>0,84</td>
<td>0,64</td>
<td>0,58</td>
</tr>
</tbody>
</table>

*Significance at 95%*
Conclusion

Housing properties in Finland (with free market rents) are not prone to macroeconomic fluctuations in financial sector, leading to lower negative effects of macroeconomic policies on price volatility in housing markets and implying more stability in the long run.

In contrast, housing properties in Sweden (with rent control) are more prone to respond on cyclical changes in financial sector, which can lead to higher negative growth in property values over time (i.e. higher volatility in housing values).
Conclusion

What will happen if rent control will be abolished in Sweden?

Abolishment of rent control in Swedish housing market will lead to growth of income return on property investments in the short run, and this growth will stabilize in the longer perspective.

The growth will depend mainly on the growing elasticity of the housing supply, which due to the faster adjustments in housing stock to changes in construction level will stabilize the property values over the long.

This implies that capital growth will decrease on average in the long run. Because of this one can also expect the decrease of the total return on average over longer time period.
References


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