Does tenure review in New Zealand’s South Island give rise to rents?

**Background**

We examine land prices arising from tenure review of South Island high country pastoral leases (see figure 1). Tenure review splits the leasehold – part is converted to freehold ownership, and part is converted to public conservation land. The Crown sells its residual interest in the most developable part of a leasehold, and buys the lessee’s interest in the part with conservation value (see figure 2).

Of the 77 runs that completed tenure review from 1992-2008, at least 28 new landowners have on-sold 176 parcels of newly freeheld land (see figure 3). In gross, these 28 new owners paid the Crown $6.9M to freehold, and have realized $134 million after on-selling 45,266ha, 44% of their new freeholds.

**Hypothesis:**

Tenure review creates rents enjoyed by former high country pastoral lessees.

**Dependent variable = ln(P_c / P_f)**

\( P_c \) = Price/ha obtained when new freeholder on-sells land.

\( P_f \) = Price/ha the new freeholder paid to attain freehold.

**Explanatory Variables.**

ln(size) = log of onsold parcel size.

Location = 1 if within 10km of Queenstown or Wanaka, and/or within sight of any of the following lakes: Wanaka, Wakatipu, Hawea, Tekapo, or Pukaki.

Time elapsed = Years between privatization and onsale.

**Data Summary Table**

<table>
<thead>
<tr>
<th>Name of lease</th>
<th>hectares</th>
<th>GPP sold</th>
<th>ln(size)</th>
<th>Location</th>
<th>Time elapsed</th>
<th>ln(P_f/ P_c)</th>
<th>Constant ln (size) Location Time R2 SER BIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alphabull</td>
<td>3365</td>
<td>$287,500</td>
<td>0.12</td>
<td>1.00</td>
<td>2008</td>
<td>-0.60</td>
<td>-0.36  -0.76 -0.81 0.14 0.09 0.818 0.892 235</td>
</tr>
<tr>
<td>Ferncliff</td>
<td>3365</td>
<td>$287,500</td>
<td>0.12</td>
<td>1.00</td>
<td>2008</td>
<td>-0.60</td>
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</tr>
<tr>
<td>Pukaki Downs</td>
<td>3365</td>
<td>$287,500</td>
<td>0.12</td>
<td>1.00</td>
<td>2008</td>
<td>-0.60</td>
<td>-0.36  -0.76 -0.81 0.14 0.09 0.818 0.892 235</td>
</tr>
</tbody>
</table>

**Results**

The large discrepancies between \( P_c \) and \( P_f \) are consistent with former lessees enjoying large rents after tenure review.

The strong negative correlation between ln(size) and ln\((P_c / P_f)\) is consistent with the option to change land use allowing rents to arise. Location and time elapsed were lesser predictors, yet still significant.

Some argue the dramatic price rise between privatization and onselling is not evidence of rents, but has other explanations. But results are inconsistent with other explanations proposed by high country farmers and the government agency in charge.

**Conclusions**

Tenure review is inefficient for at least 3 reasons:

a) The option to acquire large rents via tenure review could artificially inflate the price of pastoral leases.

b) This inflation makes tenure review increasingly expensive for the Crown. Therefore the price to purchase freehold should not be based on market prices for leaseholds in course, because the latter includes the value of the option to freehold, apply to subdivide, and sell.

c) The potential for large rents after tenure review could encourage rent seeking by existing lessees. This could manifest in lessees’ destroying conservation values on lease-hold land, rendering it devoid of conservation value and suitable for privatization.

**Footnotes**

† Variable is ln\((P_c / P_f)\). Location = 1 if within 10km of Queenstown or Wanaka, and/or within sight of any of the following lakes: Wanaka, Wakatipu, Hawea, Tekapo, or Pukaki. Time elapsed = Years between privatization and onsale.

**Linear regression**

\[ \ln(P_c / P_f) = \beta_0 + \beta_1 \ln(size) + \beta_2 \text{Location} + \beta_3 \text{Time elapsed} + \epsilon \]

**Variable definition**

* Location = 1 if within 10km of Queenstown or Wanaka, and/or within sight of any of the following lakes: Wanaka, Wakatipu, Hawea, Tekapo, or Pukaki.
* Time elapsed = Years between privatization and onsale.

**Discussion**

The dramatic price rise between privatization and onselling is not evidence of rents, but has other explanations. But results are inconsistent with other explanations proposed by high country farmers and the government agency in charge.