Does the exemption of the owner-occupied home from the pensions means test affect trade-downs? Evidence from Australia.

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BACKGROUND

- Means-testing can generate large marginal tax rates
- Incentive effects of the exemption of the owner-occupied home from the assets test not been studied
- Most means-tested programmes world-wide exempt the owner-occupied home
- Literature on residential transition of the elderly largely ignores the incentive effects of taxation and welfare policies.
Elderly home-ownership in Australia

- Age-pension in Australia exempts the owner-occupied home from the assets-test.
- Proceeds from the sale of a house count as assets towards an assets test
- Residential real estate comprises more than half of personal wealth
- Reluctance of the elderly to trade-down their family homes has important ramifications for resource allocation in the economy
Questions & overview of the paper

- How does the exemption of owner-occupied housing in the Australian age pension affect residential choice?

- What is the frequency and nature of residential transitions among older cohorts?


- Estimate the probability of a trade-down conditional upon moving
The age-pension in Australia

- Age-pension subject to assets and income test.
- Lower of the pension resulting from assets and income test is the final pension.
- The primary residence is not counted as an asset towards the asset-test.
- $3.87 reduced per fortnight, per $1000 above the full pension cut-off and below the part-pension cut-off ($1.5 since 2007)
- Rate of pension reduced by 40 cents in the dollar for income over the full-pension cut-off (50 cents since 2009)
- Different cut-offs for home owners and non home owners.
- Being on an age-pension gives other benefits.
HOUSEHOLD CHOICE

\[ HW \neq 0 \]

\[ P = \begin{cases} 
  x_1 & \text{if } OA \leq y_1 \\
  x_1 - (OA - y_1/1000) \times 1.5 & \text{if } y_1 \leq OA \leq y_2 \\
  0 & \text{if } OA \geq y_2 
\end{cases} \]

\[ HW = 0 \]

\[ P = \begin{cases} 
  x_1 & \text{if } OA \leq z_1 \\
  x_1 - (OA - z_1/1000) \times 1.5 & \text{if } z_1 \leq OA \leq z_2 \\
  0 & \text{if } OA \geq z_2 
\end{cases} \]
## Mobility snapshot

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pensioner</th>
<th>Non-pensioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moved</td>
<td>4.9%</td>
<td>2.7%</td>
</tr>
<tr>
<td></td>
<td>(0.83)</td>
<td>(0.86)</td>
</tr>
<tr>
<td>Traded-down, upon moving</td>
<td>52%</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td>(8.53)</td>
<td>NA</td>
</tr>
<tr>
<td>Value of home</td>
<td>195920</td>
<td>335188</td>
</tr>
<tr>
<td></td>
<td>(7532)</td>
<td>(22610)</td>
</tr>
<tr>
<td>Value of non-housing assets</td>
<td>130447</td>
<td>575540</td>
</tr>
<tr>
<td></td>
<td>(9100.5)</td>
<td>(46962)</td>
</tr>
<tr>
<td>Household non-pension income</td>
<td>9638.6</td>
<td>34569</td>
</tr>
<tr>
<td></td>
<td>(762.03)</td>
<td>(1946.3)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>764</td>
<td>369</td>
</tr>
</tbody>
</table>
## Move behavior of homeowners (Wave 2-3)

<table>
<thead>
<tr>
<th></th>
<th>Assets $&lt;$ FP cut-off</th>
<th>Assets $\geq$ FP cut-off and $&lt;$ PP cut-off</th>
<th>Assets $\geq$ PP cut-off</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Movers (%)</strong></td>
<td>5.05 (0.93)</td>
<td>4.14 (1.85)</td>
<td>4.00 (0.15)</td>
</tr>
<tr>
<td><strong>Traded-down (%)</strong></td>
<td>58.37 (9.62)</td>
<td>23.31 (20.08)*</td>
<td>58.9 (19.43)*</td>
</tr>
<tr>
<td><strong>Switched to renting (%)</strong></td>
<td>29 (9.44)</td>
<td>0</td>
<td>30 (18.5)*</td>
</tr>
<tr>
<td><strong>Total no. of observations</strong></td>
<td>595</td>
<td>116</td>
<td>220</td>
</tr>
</tbody>
</table>
REGRESSION SPECIFICATION I

- A selection model in terms of the marginal probability that a household will move in a year, and conditional upon moving, trade-down.

- Selection equation:
  - age, age-square (age2), sex
  - existence of a long-term health condition (health prob.), lone-person household,
  - dissatisfaction with one’s home or neighbourhood,
  - annual household non-pension income,
  - home value,
  - and value of other assets.
Regression specification II

- Four dummy variables corresponding to the full and part assets and income test thresholds:
  - non-housing assets below the full pension threshold;
  - non-housing assets between the full and part-pension thresholds;
  - non-pension income below the full pension threshold
  - non-pension income between the full and part-pension thresholds.

- For the outcome equation, exclude variables that we believe matter only to mobility: satisfaction with neighbourhood and home, family type, and sex.
Regression Results I

- As people get older the probability of a move and a trade-down falls, rising again at older ages.

- A long-term health condition is associated with a lower move probability significant at the 10% level and a lower trade-down probability, though not significant.

- The greater the satisfaction with one’s neighbourhood and home, the lower is the probability of a move, significant at 1% level.
The greater the value of the home, the higher is the probability of a trade-down, significant at the 5% level.

The dummy variables on the income tests not significant.

Non-housing assets imply a greater probability of moving, but lower probability of trading down.

Having assets below the full pension threshold is associated with a negative probability of trading down, significant at the 10% level, whereas having assets between the two thresholds is significant at the 5% level in the same direction.
## Predicted Probabilities

|                      | Pr(Tradedown=1|move=1) | Pr(move=1) | N   |
|----------------------|-----------------|------------|------|
| **All**              | 0.60            | 0.042      | 1132 |
|                      | (0.007)         | (0.001)    |      |
| **Pensioners**       | 0.57***         | 0.043      | 763  |
|                      | (0.002)         | (0.001)    |      |
| **Non-pensioners**   | 0.64            | 0.042      | 369  |
|                      | (0.006)         | (0.002)    |      |
| **Assets < FP cut-off** | 0.60***       | 0.044**    | 727  |
|                      | (0.007)         | (0.001)    |      |
| **Assets > FP, < PP cut-offs** | 0.359         | 0.037      | 185  |
|                      | (0.0197)        | (0.0023)   |      |
Conclusions

- Pensioners exhibit greater mobility, but lower conditional trade-downs than non-pensioners.
- Those with assets lower than the permissible cut-offs exhibit higher conditional probability of a trade-down, but a lower probability of a move.
- Trade-downs seem to be inhibited amongst elderly pensioners.
Policy implications

- Important questions for public policy, since housing is an important asset in most national economies

- Treatment of the principal residence in means-tested programs is a complex issue

- Eligibility criteria, taper rates, and interactions between assets and income means test schedules are all possible policy instruments that may be deployed to reduce efficiency cost.
THANK YOU

Comments?

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