

The role of local real estate market information in determining residential tenure

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Background

- Recent focus on the role of RE market knowledge on the homeownership decision
- As homeownership involves large transaction costs, a failure to buy a desirable house in the first place could be very costly to homeowners.
- A lack of information on RE market would increase the chance of failure.
- Therefore, a potential homeowner would have to collect a large amount of RE market information to avoid a case of relocation

Literature Review

- Boehm and Schlottman (1999) - transmission of RE market knowledge and experience from parents to children.
- Haurin & Morrow-Jones (2006) - different sources of information and different outcome in the tenure decision between black and white.
- Hilber (2005) - neighbourhood uncertainty and ownership status of type of building
- Often focus on the general market knowledge (e.g. general buying process)

Aims

- A causal relationship between local RE market information and homeownership decision
- As the intended moving distance increases, the amount of information on the local property market at the destination decreases.
- Thus, homeownership is likely avoided due to lack of information as a moving distance increases.
- Overall, focus on causality between the distance of move and homeownership decision.

Model & hypothesis

- Assumptions

1. $U_{G,HO} > U_{G,RT} & U_{B,HO} < U_{B,RT}$

2. $\partial p/\partial d < 0$ where p is a probability of finding desirable accommodation.

- Model

1. $E(U_{HO}) - E(U_{RT}) = p_d \cdot (U_{G,HO} - U_{G,RT}) + (1-p_d) \cdot (U_{B,HO} - U_{B,RT})$

2. For a relatively short moving distance, the expected utility from new accommodation is greater for homeowner.

- Hypothesis

As a moving distance increases, a household is likely to choose renting over owning.

Model

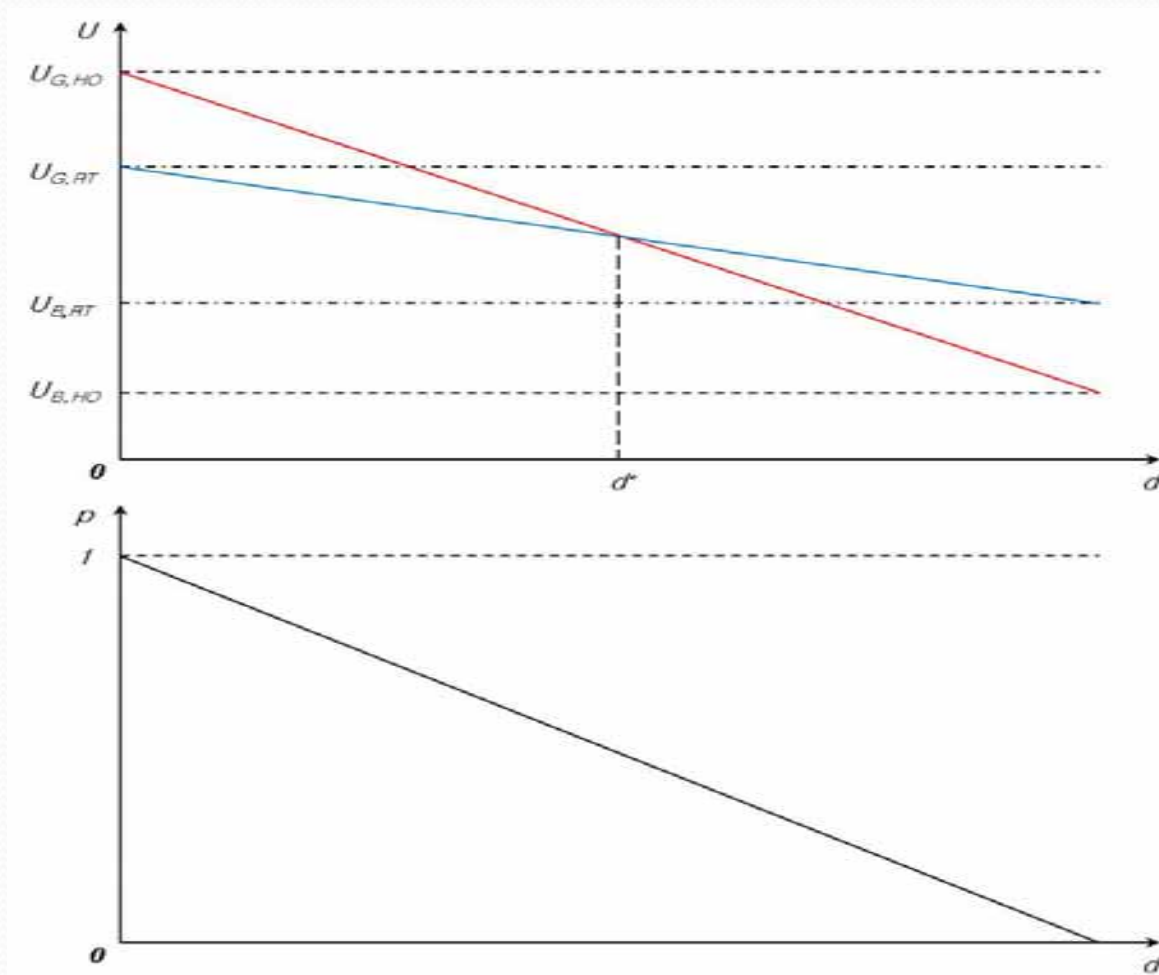


Fig 1. Expected utility and moving distance

Methodology & Data

- Survey of English Housing

1. Tenure type, moving distance, demographics & economic status of a household.
2. Cross-sectional samples pooled over 11 years (1993-2003).

- Binary model

1. $Pr(\text{homeowner}) = b_0 + b_1(\text{moving distance}) + b_2(\text{controls})$
2. b_1 : how the probability of homeownership changes as the moving distance increases.

Empirical results

- Gradual addition of control variables
 1. Demographic variables - age, sex, marital status, number of household members)
 2. Economic characteristics - status of economic activities and household income
 3. Previous tenure
- After a number of socio-demographic and economic characteristics are controlled, the negative relationship becomes stronger.

Empirical Results

Table 3. Moving distance and tenure choice (Base regression)

	(1)Linear - distance	(2)Linear - demographic	(3)Linear - economic	(4)Linear - Prev. tenure	(5)non-linear
Distance of move in miles	-0.005 ***	-0.011 ***	-0.015 ***	-0.018 ***	
Distance of move (over 50 miles exc.)					
Less than 1 mile					0.992 ***
1~2 miles					0.915***
2~5 miles					0.999***
5~10 miles					0.922***
10~20 miles					0.956***
20~50 miles					0.677***
Previous tenure type				Yes	Yes
Economic characteristics			Yes	Yes	Yes
Demographic characteristics		Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes
Region	Yes	Yes	Yes	Yes	Yes
No. of observations	9356	9356	9356	9356	9356
Pseudo R ²	0.071	0.2293	0.3157	0.3879	0.3891

Empirical results

- Entry of distance variable in a non-linear manner.
- All positive and significant coefficients – Those who moved for less than 50 miles are more likely to be a homeowner than those for over 50 miles (excluded category).
- But, no significant difference among those who moved less than 50 miles → non-linearity in the relationship between distance and probability of homeownership.
- As the distance increases, the probability of homeownership falls at an increasing rate.

Empirical Results

Table 3. Moving distance and tenure choice (Base regression)

	(1)Linear - distance	(2)Linear - demographic	(3)Linear - economic	(4)Linear - Prev. tenure	(5)non-linear
Distance of move in miles	-0.005 ***	-0.011 ***	-0.015 ***	-0.018 ***	
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Demographic characteristics		Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes
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Empirical results

- Possibility of reverse causality: tenure → moving distance.
- Requirement of information for homeownership decision may limit a search range. Then, a problem of biased estimator.
- For job-related movers, a new job location determines the moving distance.
- Opportunity of observing tenure decision upon exogenously given moving distance.
- The coefficient again negative and significant.
- Interaction term (distance×previous tenure type) → Even previous homeowners are likely to choose renting when moving for long

Empirical Results

Table 4. Moving distance and tenure choice (job-related movers only)

	(2)Job	(3)Job - interaction
Distance of move in miles	-0.017 ***	-0.021
Interaction : distance × previous tenure type		
distance × mortgaged homeowner		-0.010
distance × local authority tenant		-0.018
distance × housing assoc. tenant		0.016
distance × private tenant		0.011
Previous tenure type	Yes	Yes
Economic characteristics	Yes	Yes
Demographic characteristics	Yes	Yes
Year	Yes	Yes
Region	Yes	Yes
No. of observations	1052	1052
Pseudo R ²	0.3192	0.3224

Empirical results

- Distance of move and local area knowledge

$$\underline{Pr(vandalism) = b_0 + b_1(distance) + b_2(controls)}$$

- As the distance of move increases, a mover is less likely to report local problem (vandalism).
- Interaction effect (distance × homeowner) insignificant
 - ➔ As the distance increases, HO and PR equally have a difficult in being aware of neighbourhood problems.

Empirical Results

Table 1. Moving distance and neighbourhood problem awareness (vandalism)

	(1) Distance - non-linear	(2) Distance - linear	(3) Interaction
Distance of move in miles		-0.006 ***	-0.006 ***
Distance of move (over 50 miles exc.)			
Less than 1 mile	0.462 ***		
1~2 miles	0.196*		
2~5 miles	0.010		
5~10 miles	0.159		
10~20 miles	-0.201		
20~50 miles	-0.005		
Homeowner	0.010		0.004
Interaction: distance * tenure (HO)			0.000
Demographic characteristics	Yes	Yes	Yes
Economic characteristics	Yes	Yes	Yes
Year	Yes	Yes	Yes
Region	Yes	Yes	Yes
No. of observations	6891	6891	6891
Pseudo R ²	0.0461	0.0412	0.0412

Empirical results

- Distance of move and satisfaction with new neighbourhood

$$\underline{Pr(\text{very satisfied}) = b_0 + b_1(\text{distance}) + b_2(\text{controls})}$$

- As the distance of move increases, a mover is less likely to report local problem (vandalism).
- Interaction effect (distance × homeowner) insignificant
 - ➔ As the distance increases, HO and PR are equally have a lower level of satisfaction with new neighbourhood.

Empirical Results

Table 2. Moving distance and area satisfaction

	(1) Distance - non-linear	(2) Distance - linear	(3) Linear with Interaction
Distance of move in miles		-0.006 ***	-0.009 ***
Distance of move (over 50 miles exc.)			
Less than 1 mile	0.390 ***		
1~2 miles	0.328**		
2~5 miles	0.262**		
5~10 miles	0.291**		
10~20 miles	0.216		
20~50 miles	0.257		
Homeowner	0.442 ***		0.349***
Interaction: distance * tenure (HO)			0.006
Demographic characteristics	Yes	Yes	Yes
Economic characteristics	Yes	Yes	Yes
Year	Yes	Yes	Yes
Region	Yes	Yes	Yes
No. of observations	9356	9356	9356
Pseudo R ²	0.0558	0.0554	0.0558

Conclusion

- Summary of findings
- Implication – the role of renting sector that facilitate the immigration of labour force.