

Work, Household Dynamics and Housing Insecurity

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Labour & Housing Market Context

- Housing insecurity typically increases during periods of high job losses
- However mortgage arrears/ defaults and rental/mortgage stress peaked during period of high growth and low unemployment
- The overall rate of arrears calculated by Standard & Poors reached highest peak of 1.84% in January 2009 in the prime mortgage market and 17.09% in sub-prime market (Standard & Poors, 2009)
- In March the rates had declined to 1.63% for prime lending and 16.46% for sub-prime
- Reduction in arrears linked to interest rate cut totalling 4.25% between September 2008 to April 2009
- Rates rising again in line with changes in employment and underemployment
- Housing stress in both rental and purchaser market predicted to rise once again

Labour & Housing Market Context

- Data analysis covers from 2001 -2003
- Housing payment difficulties influenced by both labour market and housing market side factors during this period
 - Time of rapid growth in house prices
 - Growing stress in both rental and purchased housing
 - Long run growth in non standard work including casual, fixed term, part-time, self employment

Existing Research

Two main themes in the international literature on the connections between labour insecurity, non standard employment and household consumption:

- Self employment, fixed term, casual, and also unemployment linked to increased risk of payment difficulties/mortgage default (Forrest & Kennett, 1997; Ford & Wilcox, 1998; Burrows, 1998; Burrows & Ford, 1998; Böheim & Taylor, 2000; Croft, 2001; Horsewood & Doling, 2004)
- Precautionary motive linked to labour insecurity and non standard employment reducing confidence in household consumption including purchase of a home (Benito, 2006; Dieleman & Everaers, 1994; Robst et al, 1999; Wiens-Tuers, 2004)
- Main causal mechanisms include unpredictability of earnings, loss of hours, limited entitlements and movement in and out of work

Research Questions

- Is non standard employment associated with an increased risk of housing insecurity in both rental and purchaser housing once controlling for other household conditions?
- Is there evidence of a precautionary effect on housing consumption amongst households in non standard employment once controlling for other household conditions?

Employment Measures

- Individual attribute approach – individual unit of analysis to household unit of measurement (Duncan & Hill, 1985)
- Dependant variable: Not being able to ‘pay the mortgage or rent on time’ in both renter & purchaser models

Household employment participation	Household contracts	Individual continuum of participation
Job Seeking	Job Seeking	Fully excluded
All unattached	All unattached	Discrete participation
One member employed part time	Non permanent	Episodic participation
One member employed full time	At least one permanent	Continuously employed
2 or more employed part time	All self employed	
1 f/time and 1 or more p/time		
2 or more employed full time		

Descriptive Comparison

Rental arrears = 19%

Purchaser arrears = 8%

	Arrears Samples			
	Renters %		Purchasers %	
	No Arrears	Arrears	No Arrears	Arrears
<i>Household Contract Status</i>				
Job seeking household	5	7	1	6
All unattached	26	17	3	10
No permanent members	17	27	12	19
All self employed household	5	10	8	15
One or more permanent	47	39	76	50
	100	100	100	100

Descriptive Comparison

Arrears Samples

Renters %

Purchasers %

No Arrears Arrears No Arrears Arrears

Hours Worked

No employed members	31	24	4	15
One member employed part time	11	16	4	10
2 or more employed part time	3	4	2	2
one member employed full time	25	29	28	29
2 or more employed full time	18	15	31	19
1 full time and 1 or more part time	12	12	31	25
	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Descriptive Comparison

	Arrears Samples			
	Renters %		Purchasers %	
	No Arrears	Arrears	No Arrears	Arrears
<i>Individual Employment Participation</i>				
Continuous participation	36	31.5	66	48
Episodic participation	21	31.5	12	24
Discrete non participation	15	19	14	17
Full exclusion	28	18	8	11
	100	100	100	100
	N=4,076	N=972	N=5,821	N=482

Static Panel Model

Expressed as binary latent response model with random intercept added in equation 1.2 to control for dependence amongst repeated observations and unobserved heterogeneity

$$y_i = \begin{cases} 1 & \text{if } y_i^* > 0 \\ 0 & \text{otherwise} \end{cases} \quad 1.0$$

$$y_{it}^* = \mathbf{x}'_{it} \boldsymbol{\beta} + \varepsilon_{it}^* \quad 1.1$$

$$y_{it}^* = \mathbf{x}'_{it} \boldsymbol{\beta} + a_i + u_{it} \quad 1.2$$

$$\text{Cov}(x_{ij}, a_i) = 0, \quad t = 1, 2, \dots, T; \quad j = 1, 2, \dots, k. \quad 1.3$$

Static Model Results: Arrears

	Rental Arrears		Purchaser Arrears	
<i>Household Employment</i>	OR		OR	
Job seeking household	1.229		5.304	***
All unattached	1.208		2.634	***
No permanent members	1.569	***	1.460	**
All self employed household	2.778	***	2.743	***
One or more permanent (Omitted)	1.0		1.0	
One member part-time	0.968		1.229	
One full-time	1.143		1.332	*

Static Model Results: Arrears

	Rental Arrears		Purchaser Arrears	
<i>Individual Employment</i>	OR		OR	
Continuous participation (omitted)	1.0		1.0	
Episodic participation	1.358	*	1.488	*
Discrete participation	1.359	*	1.389	*
Full exclusion	0.690		0.545	**
Individual casual contract	1.507	**	1.537	**

Static Model Results: Arrears

	Rental Arrears		Purchaser Arrears	
<i>Other Household Conditions</i>	OR		OR	
Income support recipient	1.359	**	1.725	***
Don't' think could raise \$2000	2.680	***	3.553	***
Member leaving w2 or w3	0.951		1.421	
Member joining w2 or w3	0.946		1.092	
Couple family depend children	1.447	**	0.736	*
Lone parent depend children	1.237		1.135	
Lone person	0.939		0.965	
All other family groups (Omitted)	1.0		1.0	
Monthly household equiv income/100	0.988	***	0.962	***

Static Model Results: Arrears

<i>Other Household Conditions</i>	Rental Arrears		Purchaser Arrears	
	OR		OR	
Monthly housing costs/100	1.036	*	0.996	
Social housing	0.556	***		
Amount owing on loan			1.0035	***
Age	1.036		0.984	
Age Squared	0.999	**	1.0001	
Long term health condition	1.167		1.076	
Australian born	1.502	***	1.516	**
Degree	0.433	***	1.072	
Wald chi2	269.22	***	254.13	***
Likelihood-ratio test of rho	298.57	***	172.38	***
Number of observations: N=	4,953		6,130	
Number of groups: N =	2,166		2,502	

Transition into home ownership

- Multinomial transition model with random effects estimating probability of transition from renter to purchaser status from the housing tenure variable: owner/purchaser, rent/rent buy and living rent free
- Probability of making a transition from renter to purchaser is conditional on origin state

$$\begin{aligned}\pi_{it,jk} &= \text{Prob}(y_{it} = k | y_{i,t-1} = j) \\ &= \text{Prob}(y_{it} = k | \{y_{i,t-1} = j, y_{i,t-2}, \dots, y_{i,1}\})\end{aligned}$$

j is the state or tenure of origin

k the destination tenure

Renters making a transition in either wave 2 or 3 were = 1 when the transition occurs.

Renters remaining in that state in all three waves = 0

$$y_{it,jk} = \begin{cases} 1 & \text{if } y_{it} = k \text{ and } y_{i,t-1} = j, \\ 0 & \text{otherwise} \end{cases}$$

Transition into home ownership

<i>Household employment</i>	OR	
No employed members time invariant (omitted)	1.0	
All self employed time invariant	1.524	
No permanent members time invariant	1.000	
At least one permanent time invariant	2.257	***
Two full time members time invariant	1.388	
One full time and one part time members time invariant	1.041	
No full time members (omitted)	1.0	

Transition into home ownership

<i>Individual employment income, housing price</i>	OR	
Continuous participation	2.400	***
Episodic participation	1.061	
Discrete participation	1.508	
Full exclusion (Omitted)	1.0	
Degree	1.255	
Easily raise \$2000	1.775	***
Monthly household equiv income/100	1.013	***
Lagged house price index	1.035	***

Transition into home ownership

<i>Other household conditions</i>	OR	
Member leaving household w2 or w3	0.450	**
Member joining household w2 or w3	0.650	*
Couple family with depend children time varying	3.980	***
Couple time varying	2.155	***
Lone person time varying	0.485	**
Other family groups (omitted)	1.0	
Age of oldest member in household	1.060	
Age Squared	0.999	*
Wald chi2 = 276.29 ***	Observations: N= 3706	
Likelihood-ratio test of rho = 305.17 ***	Groups N= 2022	

Summary & Implications

- Strong link between employment status and housing security
- There are important differences amongst renters and purchasers

Purchasers

- Purchasers less likely to experience payment difficulties
- Unemployment/being out of the labour market events are more destabilizing for purchasers with the effect increasing when there are no employed members in the household
- Households relying on non standard employment, especially self employment have increased risk of payment difficulties

Implications

- Risk to housing payments influenced by any event that threatens both the amount and predictability of earnings linked to both higher payments and limited flexibility

Summary & Implications

Renters

- Payment difficulties more frequent
- Both secure and arrears samples are less likely to have permanent employment in the household
- Households with no permanent/self employment have higher risk compared with those with no employed members and is likely to link to mediating effect of social housing

Implications

- Non permanent renters falling through social assistance safety net

Summary & Implications

Transitions

- Typical profile of households moving into home ownership are stable and financially secure families with at least one member in permanent employment
- Importance of permanent employment in the long term security decision to purchase confirm the influence of a precautionary motive attached to labour and housing security
- The insignificance of full time employment over permanent employment suggests that is not only the hours worked but overall employment security that influences the way households consume housing

Summary & Implications

Policy responses

- Mortgages – mortgage relief, shared equity, lending criteria
- Rental Sector – NRAS and renewed investment in social housing
- Rethink of housing assistance provided to those in self employment and non permanent work
- Generating good quality jobs & basic security, monitoring sectors with high job losses, adequate notice for those experiencing redundancies

Future research

- Longer panel following households moving into home ownership
- State dependence of payment difficulties
- Disaggregated analysis of self employment
- Further qualitative research on the measurement of housing insecurity and perception/decision making processes linked to home ownership amongst renters in non standard employment

Thank you

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