



THE UNIVERSITY OF
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Personal Residential Real Estate Investment in Australia: Investment Parameters and Investor Characteristics

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Motivation

- n The private rental market houses a 20% of Australian households (1996).
 - n 60% of rental units
 - n 75% is the comparable figure in US.
- n Surprisingly, the decision to invest in residential income property not discussed in literature.

Research Questions

- n Three simple questions:
 - n Who invests in income property?
 - n What financial and socio-demographic factors motivate income property investment?
 - n How does income property investment change over the property cycle?
- n One hard question – the effect of taxation – is topic of current research.

Literature

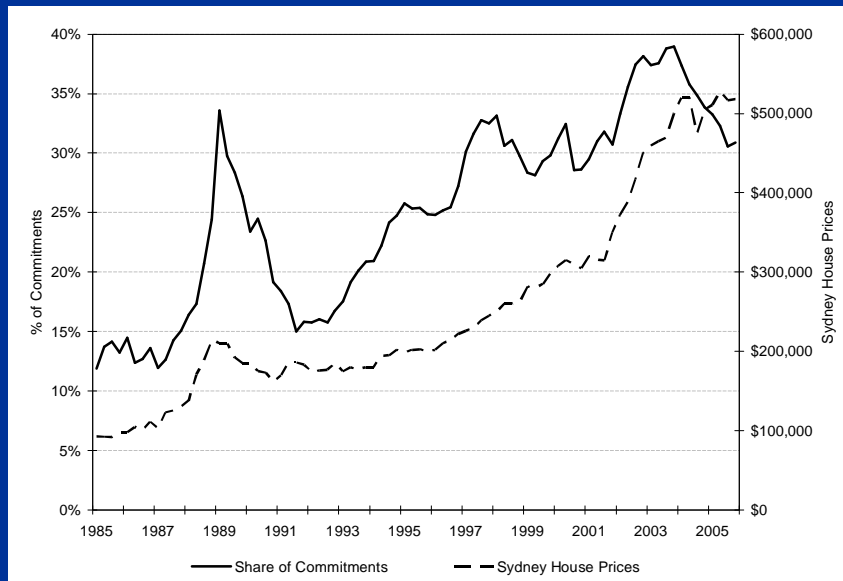
- n There is no present literature!
- n Three related streams:
 - n Real estate as an asset class within the life-style consumption model
 - n Tenure choices of households
 - n Public policy and the provision of low-rent or public housing

Data

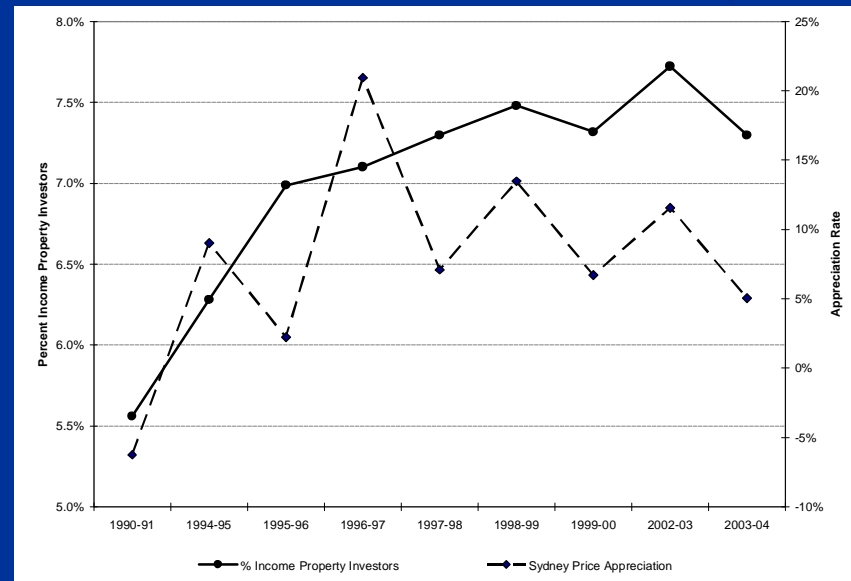
- n Survey of Income and Housing (SIH)
 - n Confidential unit record files from the Australian Bureau of Statistics
 - n Nine surveys: 1990-91, 1994-95, 1995-96, 1996 – 97, 1997 – 98, 1999 – 2000, 2000 – 2001, 2002-03, 2003-04

Our Sample Period

% of Mortgage Commitments used for Residential Income Property Investment



% of Income Units that are Income Property Investors



Question 1: Who invests?

Brown, Schwann & Scott (2007)

Question 1: Economic Factors

Acronym	Description	Full Sample	Property Investors	Difference	Difference T-Stat
PERMINC	Permanent Income	\$760	\$1,020	\$260	56.0 **
TRANINC	Transitory Income	-\$1	\$195	\$196	37.0 **
FTEMP	Employed Full Time	49.9%	67.5%	17.6%	30.8 **
PTEMP	Employed Part Time	7.7%	6.0%	-1.6%	4.3 **
OWNER	Home Owner	56.2%	79.5%	23.3%	37.8 **
FIRSTHO	First Homeowner	4.2%	2.6%	-1.6%	7.3 **
NMORT1	One Mortgage	22.4%	27.7%	5.3%	9.8 **
NMORT2	Two or More Mortgages	3.2%	5.8%	2.6%	11.7 **



Question 1: Demographic Factors

Acronym	Description	Full Sample	Property Investors	Difference	Difference T-Stat
AGE	Age	44.5	47.5	3.0	12.2 **
MALE	Male	72.7%	87.4%	14.7%	28.2 **
MARRIED	Married or DeFacto	48.3%	73.5%	25.2%	41.7 **
DIVORCED	Divorced, Separated, Widowed	10.9%	5.4%	-5.5%	15.4 **
CHILD1	One Child	10.7%	13.3%	2.7%	6.0 **
CHILD2	Two Children	11.4%	17.2%	5.8%	14.2 **
CHILD3	Three or More Children	5.8%	8.2%	2.4%	8.7 **



Question 2: What financial and socio-demographic factors motivate income property investment?

Modeling

- n The purchase of residential rental income property is a pure investment decision
- n Logit model:
 - n Dependant variable:
 - n Household invests in income property {0,1}
 - n Independent variables:
 - n household wealth (or proxies),
 - n variables representing risk and return,
 - n variables that control for lumpiness of the investment and
 - n controls for gearing.

Question 2: Economic Factors

Parameter	Across Cycle		Diff. Effect
	Estimate	t-Stat	
Permanent Income (×100)	0.202	(32.640) **	0.522
Transitory Income (×100)	0.053	(23.209) **	0.109
Full Time	-0.172	(-3.573) **	-0.032
Part Time	0.222	(3.595) **	-0.003
Home Owner	0.819	(19.344) **	0.183
First Home Owner	-0.791	(-9.350) **	0.014
No. Mortgages = 1	-0.529	(-14.840) **	-0.026
No. Mortgages = 2	-0.145	(-2.293) **	-0.003

Question 2: Demographic Factors

Parameter	Across Cycle		Diff. Effect
	Estimate	t-Stat	
Age	0.007	(5.252) **	0.017
Male	-0.144	(-2.726) **	-0.022
Married or DeFacto	0.217	(4.679) **	0.054
Divorced, Separated, Widowed	-0.177	(-2.726) **	0.011
1 Child	-0.090	(-2.049) **	-0.002
2 Children	-0.031	(-0.735)	-0.002
3+ Children	-0.134	(-2.485) **	-0.003

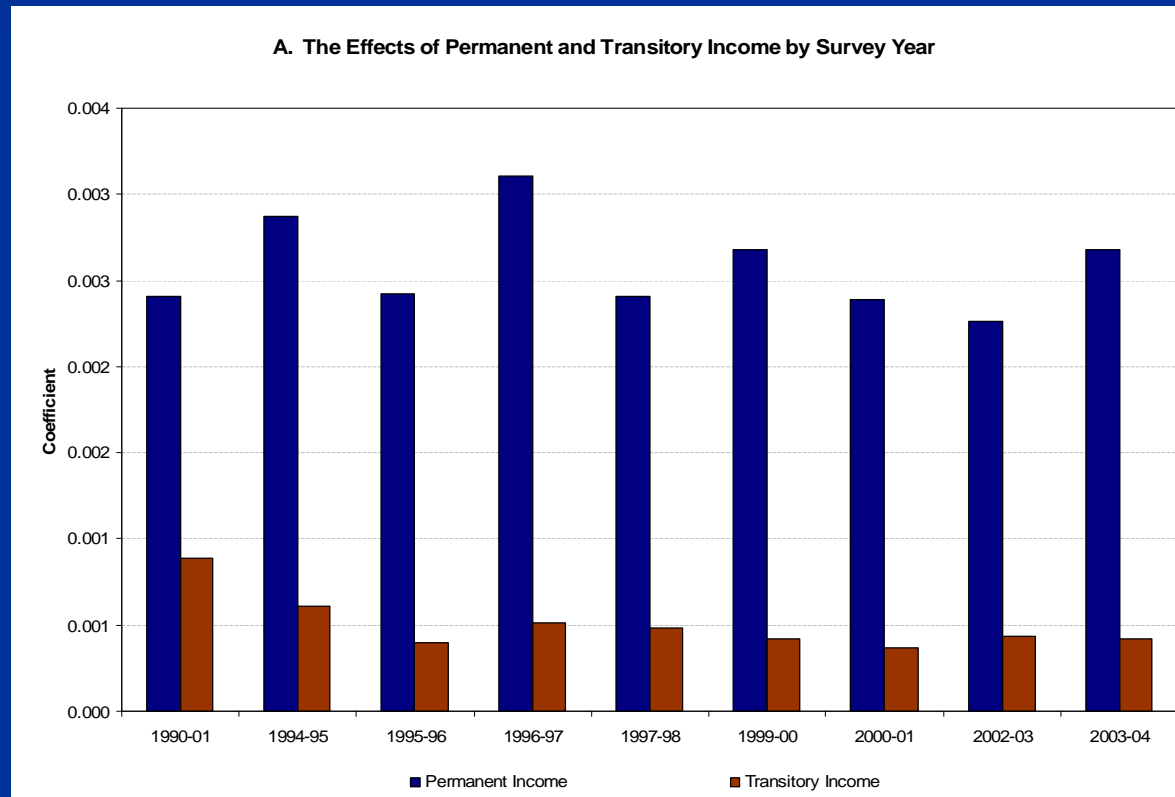
Question 2: Location (relative to NSW)

Parameter	Across Cycle			Cycle Controlled		
	Estimate	t-Stat	Diff. Effect	Estimate	t-Stat	Diff. Effect
Intercept	-5.013	(-64.170)**	--	-5.279	(-61.469)**	--
Victoria (Melbourne)	-0.082	(-2.255)**	0.001	-0.080	(-2.214)**	0.001
Queensland (Brisbane)	0.237	(6.288)**	0.006	0.244	(6.437)**	0.006
South Australia (Adelaide)	-0.242	(-4.187)**	0.007	-0.244	(-4.217)**	0.008
Western Australia (Perth)	0.159	(3.359)**	0.002	0.168	(3.522)**	0.002
Tasmania (Hobart)	-0.154	(-1.599)**	0.002	-0.149	(-1.545)*	0.002
Northern & Capital Territories	0.346	(4.462)**	0.009	0.334	(4.293)**	0.009

No significant differences across cycle

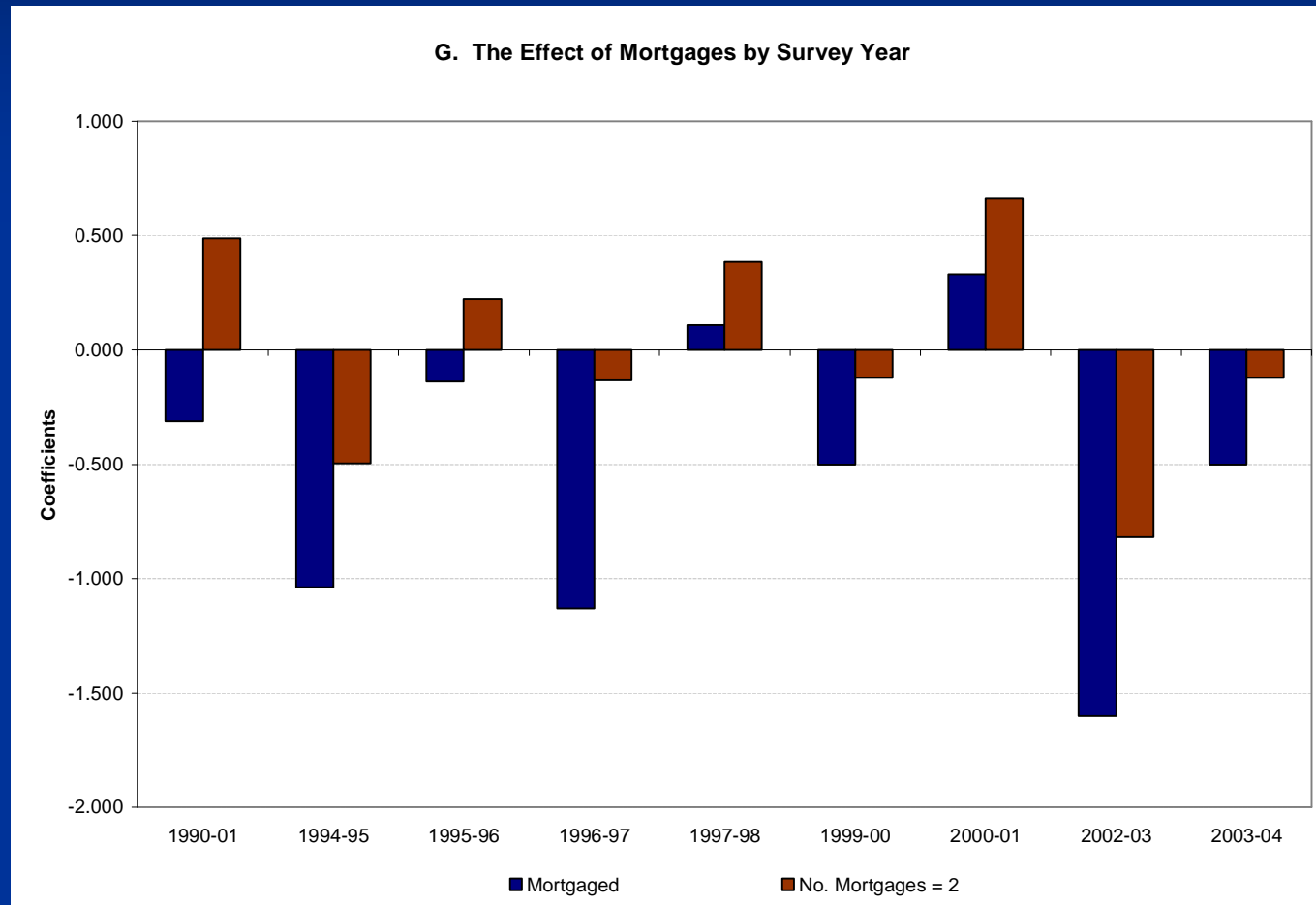
Question 3: How does income property investment change over the property cycle?

Question 3: Permanent and Transitory Income



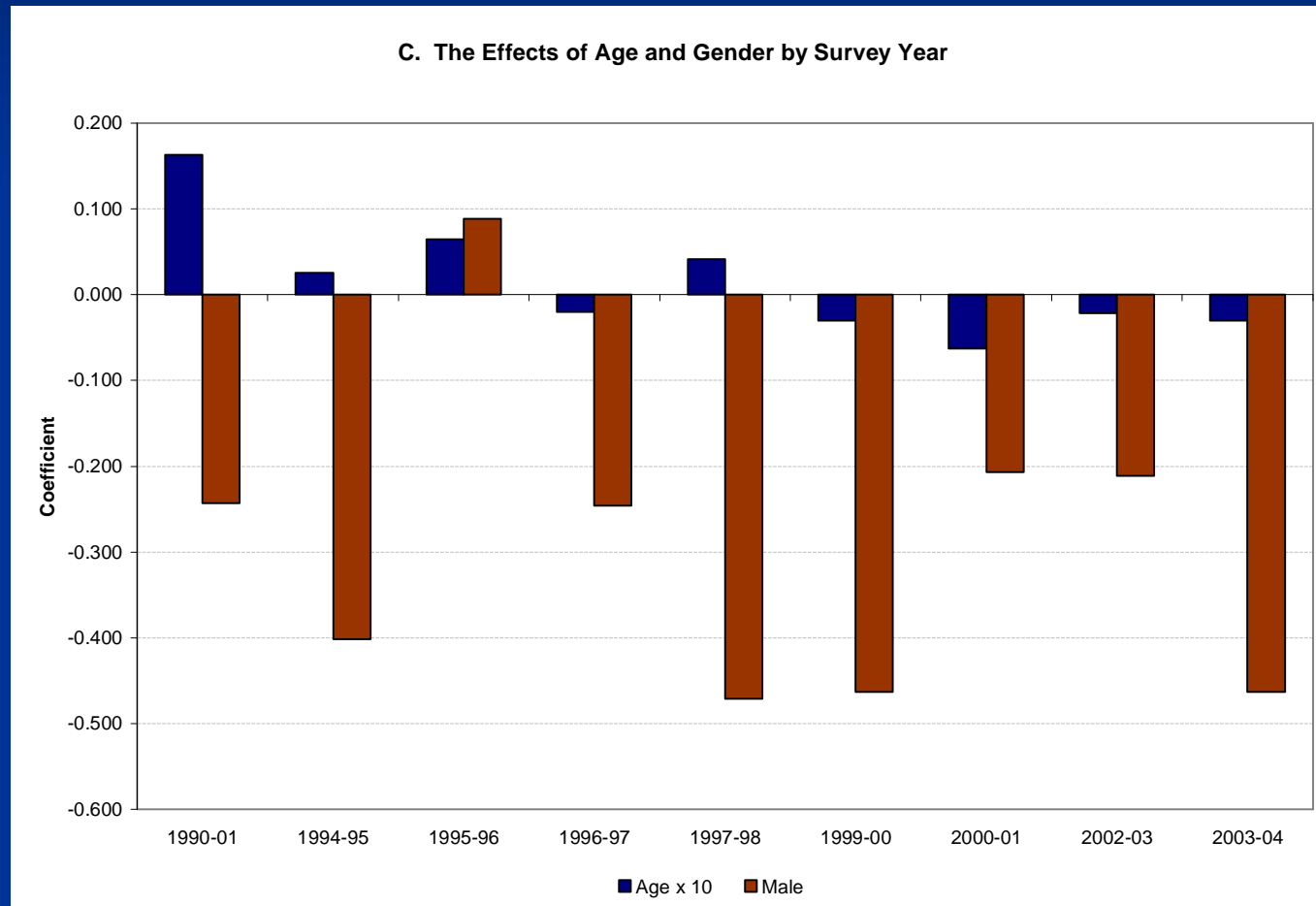
Brown, Schwann & Scott (2007)

Question 3: Number of Mortgages



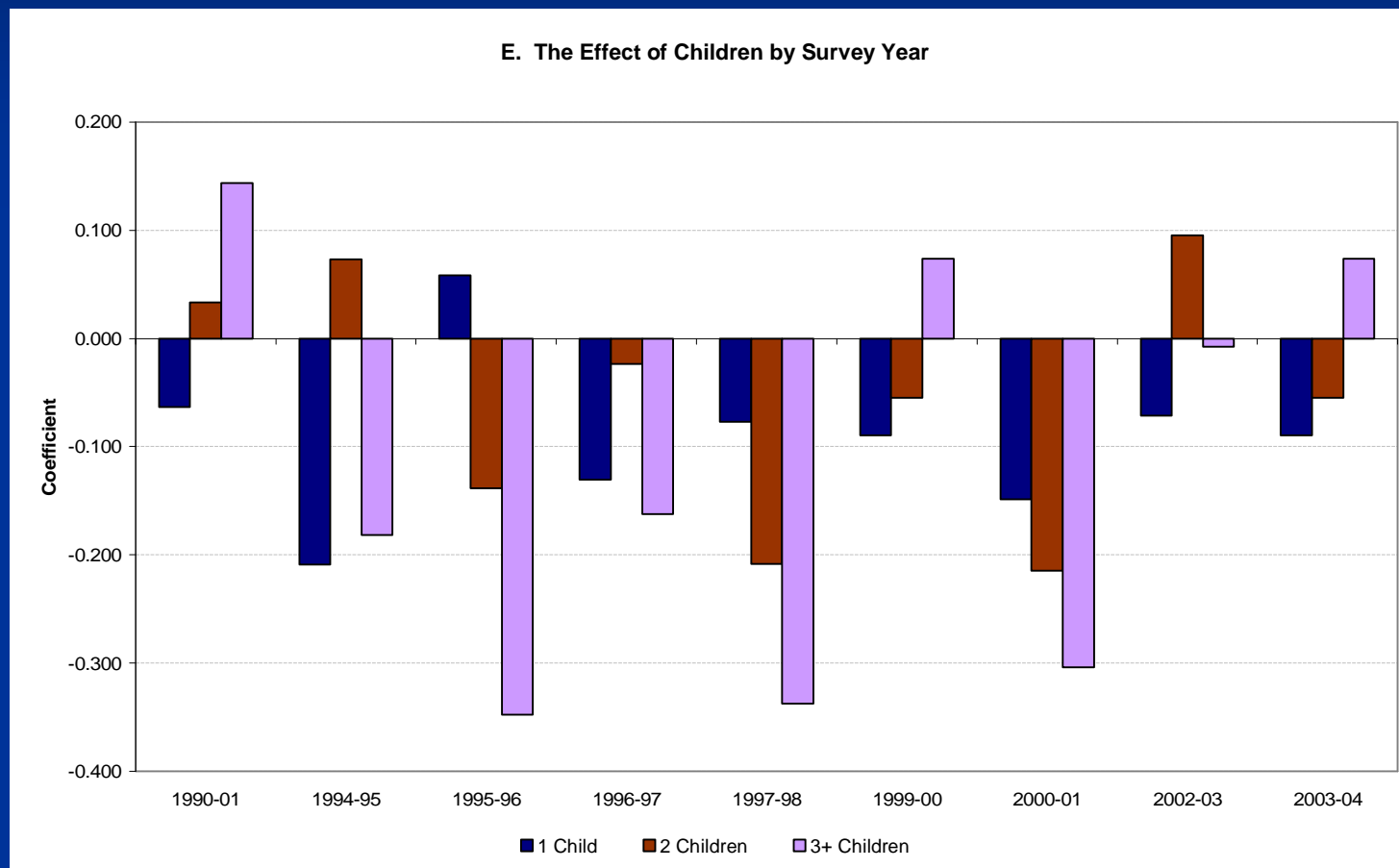
Brown, Schwann & Scott (2007)

Question 3: Age and Gender



Brown, Schwann & Scott (2007)

Question 3: Children



Brown, Schwann & Scott (2007)

Summary

- n Its an investment story
 - n Permanent and transitory income are the prime drives with little fluctuation in their impact over cycle.
 - n The asset backing of homeownership is important, again with little change over cycle.
 - n Mortgage indebtedness has a positive effect in downturns and an negative in upturns.
 - n Demographics effects are minor and some are changing with generational shift.