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by Life Cycle

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APPENDIX A: DEMAND ESTIMATES FOR WHITE HOUSEHOLDS BY LIFE CYCLE

The following tables present estimates of the demand equations developed in Chapter 4 for each of sixteen life-cycle classes. Definitions of independent and dependent variables are given in the text on pages 97 and 98.

TABLE A.1 PROBABILITY OF OWNERSHIP

$Q_1 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln (POWN/PRENT)$				
Life-Cycle Class	Income β ₁	Incremental Price of Owning \$\beta_2\$		
Single, alone	.762ª	372 ^b		
Single, with others	.582	889ª		
Separated, no children	.175ª	721a		
Separated, children	.545ª	564 ^b		
Married, head < 30, no children	1.189ª	-1.257ª		
Married, head < 30, 1 child	.848ª	606ª		
Married, head <30, 2+ children	.701 a	501a		
Married, head 30-39, no children	.487ª	517^{a}		
Married, head 30-39, 1 child	.396ª	462ª		
Married, head 30-39, 2+ children	.232ª	209ª		
Married, head 40-49, no children	.158ª	103 a		
Married, head 40-49, 1 child	.117ª	109ª		
Married, head 40-49, 2+ children	.114ª	082		
Married, head 50+, no children	.147ª	240ª		
Married, head 50+, 1 child	.060 a	105ª		
Married, head 50+, 2+ children	.132ª	055		

^a Significant at .05 level.

bt-ratio greater than one.

TABLE A.2 **DWELLING-UNIT SIZE, OWNERS (ROOMS)**

$Q_2 = \beta_0 Y^{\beta}$	1 PR ^{β2}	
	Income	Price
Life-Cycle Class	<u>β</u> 1	β2
Single, alone	.0425	1204
Single, with others	.0761 a	2404
Separated, no children	.0864ª	−.0878 ^b
Separated, children	.0423ª	1104
Married, head < 30, no children	.1026ª	1292ª
Married, head < 30, 1 child	.0761 a	1305 ^b
Married, head < 30, 2+ children	.1001 a	1104^{a}
Married, head 30-39, no children	.0628ª	1192 ^b
Married, head 30-39, 1 child	.1193ª	1084 ^b
Married, head 40-39, 2+ children	.1653ª	1205ª
Married, head 40-49, no children	.1436ª	1405 ^b
Married, head 40-49, 1 child	.1365ª	1332^{b}
Married, head 40-49, 2+ children	.1838ª	1102ª
Married, head 50+, no children	.1682ª	1502 ^b
Married, head 50+, 1 child	.1567ª	1002ª
Married, head 50+, 2+ children	.2571 a	0905 ^b

^aSignificant at .05 level. ^b *t*-ratio greater than one.

TABLE A.3 STRUCTURE AGE, OWNERS (YEARS)

$Q_{3} = \beta_{0} Y^{\beta_{1}} P^{\beta_{2}} (PA_{1})^{\beta_{3}} (PI_{1})^{\beta_{4}}$				
		Price of Standard	Incremental Price of Newer	Incremental Price of Larger
Life-Cycle Class	Income β ₁	Bundle β_2	Unit β ₃	Lot β_4
Single, alone	3519°	.4816ª	1.1301	7532
Single, with others	3460°	.3912 ^b	.8224	2.1288°
Separated, no			,	
children	1306ª	.2475ª	.7588 ^b	.0207
Separated, children	0507	.6981	.6689	2.3505ª
Married, head < 30,				
no children	0594	.0521	.6423	.2663
Married, head < 30 ,				
1 child	0704	.2182b	2.4750°	.6887
Married, head < 30 ,			•	
2+ children	2828ª	.2387b	.1499	1.9788°
Married, head 30-39,	•			
no children	3062ª	.4914ª	2137	.0340
Married, head 30-39,	.=			
1 child	1720ª	.2701ª	1.4390ª	.8792ª
Married, head 30-39,	****		5 4000	2050h
2+ children	2200ª	.4168ª	.7198°	.3250 ^b
Married, head 40-49,	,	22103		eceeb
no children	1668ª	.2319ª	1.4154ª	.5655 ^b
Married, head 40-49,	153.49	aaaah	1 45019	oscob
1 child	1734ª	.0998 ^b	1.4501°	.8758 ^b
Married, head 40-49,	10438	200.48	1 54518	1 22708
2+ children	1842ª	.2804ª	1.5451 ^a	1.2378°
Married, head 50+, no children	2039ª	.2516ª	1.0868ª	.2814 ^b
	2039	.2310	1.0000	.2014
Married, head 50+, 1 child	1899ª	.2369b	.5508	.8358 ^b
Married, head 50+,	1077	.2307	00دد.	0000
2+ children	0549	.4746°	.2616	6985

^a Significant at .05 level. ^b t-ratio greater than one.

TABLE A.4
PROBABILITY STRUCTURE AGE POST-1940, OWNERS

$Q_4 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln P + \beta_3 \ln (PA_2) + \beta_4 \ln (PL_1)$				
Life-Cycle Class	Income β ₁	Price of Standard Bundle β ₂	Incremental Price of Newer Unit β3	Incremental Price of Larger Lot β 4
		2828ª	-1.4831a	2223
Single, alone Single, with others	.2467 ^a	2394 ^b .	-1.4631 ^b	2223 9815 ^b
Single, with others Separated, no	.1107	2394 .	0024	9613
children	.0516 ^b	1927ª	3846 ^b	.1732
	0048	1927 4038 ^a	7916 ^b	-1.6446°
Separated, children Married, head < 30,	~.0046	4036	/916	-1.0440
no children	0249	2315ª	.2022	1476
Married, head < 30,	0249	2313	.2022	14/6
1 child	.0227	0562b	1107	3442 ^b
Married, head < 30,	.0227	0302	1107	5442
2+ children	.0146	0369 ^b	3820 ^b	6481ª
Married, head 30-39,	.0140	.0307	.5020	.0401
no children	0007	1302 ^b	3505 ^b	0854
Married, head 30-39,	.0007	.1502	.5505	.0054
1 child	0300 ^b	1422ª	4745 ^b	3091 ^b
Married, head 30-39,	.0500	*****		.5071
2+ children	0002	1559ª	1868 ^b	2696ª
Married, head 40-49,			*1000	.2000
no children	.0306 ^b	1533ª	3285ª	2092 ^b
Married, head 40-49,				
1 child	.0332b	0712 ^b	6114ª	2809 ^b
Married, head 40-49,				
2+ children	.0122	1268ª	3412^{a}	1069
Married, head 50+,				
no children	.0746ª	1667ª	5097ª	2717 ^b
Married, head 50+,				
1 child	.0510 ^b	1108^{b}	−.5553 ^b	7322ª
Married, head 50+,				_
2+ children	0063	1979ª	.0405	4463 b

^a Significant at .05 level.

bt-ratio greater than one.

TABLE A.5
PROBABILITY STRUCTURE AGE POST-1960, OWNERS

$Q_5 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln P + \beta_3 \ln (PA_1) + \beta_4 \ln (PL_1)$				
			Incremental	Incremental
		Price of	Price of	Price of
		Standard	Newer	Larger
	Income	Bundle	Unit	Lot
Life-Cycle Class	β,	β_2	β_3	β_4
Single, alone	.0900ª	1265 ^в	3589 ^b	.4254 ^b
Single, with others	.0887b	0774	7425 ^b	−.5953 ^b
Separated, no				
children	.0447ª	.0018	1632	.1213
Separated, children	.0078	1779ª	2394	2689
Married, head < 30,				
no children	0348	.1180	2846	.0560
Married, head < 30,				
1 child	0208	1058 ^b	-1.3403ª	2913
Married, head < 30,				
2+ children	.1648ª	−.ԴԴ98 ^ь	0051	7810^{a}
Married, head 30-39,				
no children	.1566ª	1638 ^b	.0699	.3139
Married, head 30-39,			•	
1 child	.0544ª	0808b	4144 ^b	3992 ^b
Married, head 30-39,				
2+ children	.1376ª	1520a	2650 ^b	0606
Married, head 40-49,				
no children	.0486ª	0322	5069ª	2228
Married, head 40-49,				
1 child	.0630a	0005	7175ª	3706 ^b
Married, head 40-49,				
2+ children	.0997ª	1046ª	5461ª	6757ª
Married, head 50+,				
no children	.0591ª	0601a	3090ª	.0345
Married, head 50+,				
1 child	.0580 ^b	0693	2096	.0994
Married, head 50+,				
2+ children	.0299	1674ª	.0207	.8253b

^a Significant at .05 level.

bt-ratio greater than one.

TABLE A.6 LOT SIZE, OWNERS (ACRES)

	$Q_6 = \beta_0 Y^{\beta_1} P^{\beta_2} (PA_1)^{\beta_3} (PL_1)^{\beta_4}$				
		Price of Standard	Incremental Price of Newer	Incremental Price of Larger	
	Income	Bundle	Unit	Lot	
Life-Cycle Class	β	β2	β3	β_4	
Single, alone	.2015ª	2642 ^b	-1.1544 ^b	-1.0201 ^b	
Single, with others	.3092ª	8147ª	-1.1602 ^b	-1.3822 ^b	
Separated, no					
children	.1330ª	3759ª	-1.4323ª	-1.8074ª	
Separated, children	.0522	2619 ^a	5140	-2.1977ª	
Married, head < 30,					
no children	.2640ª	3782	1.1189 ^b	-2.9636ª	
Married, head < 30,					
1 child	0149	1905 ^b	.1432	5538 ^b	
Married, head < 30,					
2+ children	.1387ª	1178 ^b	2650	-1.2323a	
Married, head 30-39,			.2050	1.2020	
no children	.1353 ^b	2117 ^b	.6107	5282	
Married, head 30-39,		,	10107	.5202	
1 child	.3448ª	1820a	4574 ^b	-1.072ª	
Married, head 30-39,	.5	.1020	. 1371	1.072	
2+ children	.2939ª	1002a	2134 ^b	5316ª	
Married, head 40-49,	.2/3/	.1002	.2154	.5510	
no children	.3070ª	2255ª	3810 ^b	4046 ^b	
Married, head 40-49,	.5070	.2233	.5010	.1010	
1 child	.3541°	1789ª	0004	-1.0684ª	
Married, head 40-49,	.5541	.1702	.0004	1.0004	
2+ children	.4022ª	0702b	5196 ^b	-1.4017ª	
Married, head 50+,	.4022	0702	5150	-1.401/	
no children	.3162ª	2149ª	7225ª	-1.2361ª	
Married, head 50+,	.3102	2143	1223	-1.2301	
1 child	.4511ª	3507ª	.1464	-1.3716ª	
Married, head 50+,	.4311	3307	.1404	-1.3/10	
2+ children	.4643ª	_ 47178	_ 5402 b	7025	
2+ children	.4043	<u> </u>		.7035	

^aSignificant at .05 level.

bt-ratio greater than one.

TABLE A.7
PROBABILITY LOT SIZE LESS THAN .2 ACRE, OWNERS

$Q_7 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln P + \beta_3 \ln (PL_1) + \beta_4 \ln (PA_1)$				
Life-Cycle Class	Income βι	Price of Standard Bundle β ₂	Incremental Price of Larger Lot β ₃	Incremental Price of Newer Unit β ₄
Single, alone	0321	.2090 в	1.5755 ^b	.4902
Single, with others	−.0826 ^b	.3248ª	2.1414 ^a	6605
Separated, no				
children	0324 ^b	.3242ª	.5793ª	.3832ª
Separated, children	0639 ^b	.2162ª	.1850	.1568
Married, head < 30 ,				
no children	0967 ^в	.1443 ^b	.1590	1884
Married, head < 30,				
1 child	.0401	.2189ª	.2379	1257
Married, head < 30,	b		40.500	
2+ children	−.0352 ^b	.0811ª	.4030 ^a	.0443
Married, head 30-39,	0000	04.43	7 400%	1010
no children	.0083	.0143	.7402ª	1019
Married, head 30-39,	06119	15059	2210h	2202 h
1 child	0611ª	.1525ª	.2310 ^b	.2383 ^b
Married, head 30-39,	0.4000	1000	05.4	24008
2+ children	0482ª	.1208ª	.0764	.2409ª
Married, head 40-49,	05768	10468	1110	.1643
no children	0576ª	.1846ª	1110	.1043
Married, head 40-49,	0490ª	.0617b	.1877	.1009
1 child	0490	.001/	.10//	.1009
Married, head 40-49,	0575ª	.0988	.2912ª	
2+ children	03/3	.0988	.2912	
Married, head 50+,	, 05058	.1804ª	.4124ª	.2881 a
no children	0585^{a}	.1004	.4124	.2001
Married, head 50+,	10018	.2937ª	.4175 ^b	2422
1 child	1001, ^a	.4931	.41/3	2 4 22
Married, head 50+,	0840ª	.2647ª	.5009 ^b	.2217
2+ children	0040	.2047	.3007	

^a Significant at .05 level.

bt-ratio greater than one.

TABLE A.8
PROBABILITY LOT SIZE GREATER THAN .3 ACRE, OWNERS

$Q_8 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln P + \beta_3 \ln (PL_2) + \beta_4 \ln (PA_1)$				
			Incremental	Incremental
		Price of	Price of	Price of
		Standard	Larger	Newer
	Income	Bundle	Lot	Unit
Life-Cycle Class	βι	β_2	β_3	β4
Single, alone	.1012	0861	2221	4841
Single, with others	.0739 ^b	0820	4434	1617
Separated, no				
children	0010	0384	3644 ^b	2642
Separated, children	.2137ª	0080	7892ª	-1.1214^{a}
Married, head < 30 ,				
no children	.2066 a	3863ª	.1188	1.1345
Married, head < 30 ,			•	
1 child	.0853 ^b	1337 ^b	.0481	.1672
Married, head < 30 ,		_		
2+ children	.0126	0969 ^b	6192ª	0223
Married, head				
30-39, no children	.1292ª	1380 ^b	1809	.4478
Married, head		•	•	
30-39, 1 child	.0648ª	1371 b	4964 ^b	2942 ^b
Married, head			•	
30-39, 2+ children	.1118ª	0548 ^b	2055 ^b	.0270
Married, head				•
40-49, no children	.0458ª	.0086	.0391	3695 ^b
Married, head				
40-49, 1 child	.0760ª	0504	4918 ^b	1532
Married, head				
40-49, 2+ children	.1155ª	0492 ^b	6134^{a}	.0418
Married, head 50+,				
no children	.0943ª	0745°	3049^{a}	3433ª
Married, head 50+,				
1 child	.1456ª	1165 ^b	-1.1062^{a}	.0403
Married, head 50+,				
2+ children	.1239ª		.0468	.3949

^a Significant at .05 level.

bt-ratio greater than one.

TABLE A.9 PROBABILITY LOT SIZE GREATER THAN .5 ACRE, OWNERS

$Q_9 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln P + \beta_3 \ln (PL_3) + \beta_4 \ln (PA_1)$				
Life-Cycle Class	Income β ₁	Price of Standard Bundle β_2	Incremental Price of Larger Lot β ₃	Incremental Price of Newer Unit \$\beta_4\$
Single, alone	.0860ª	0187	.1229	.0791
Single, with others	.1170ª	2379ª	.0580	4851 ^b
Separated, no				- 100
children	.0594ª	0207	1407 ^b	4541
Separated, children	.0223	0503	0558	0974
Married, head < 30,				
no children	.0830 ^ь	0030	0164	1153
Married, head < 30 ,				
1 child	.0289	0169	0377	0017
Married, head < 30 ,				
2+ children	.0582ª	0071	.0115	.0211
Married, head				
30-39, no children	.0448 ⁶	−.0624 ^b	0097	.4415 ^b
Married, head	45500	0.45ab	0.505	
30-39, 1 child	.1720ª	−.0452 ^b	0507	.1967
Married, head	10008	0001	ozash	1006
30-39, 2+ children	.1228ª	.0021	−.0725 ^b	1086
Married, head	.1331 a	0467 ^b	0207	1063
40-49, no children Married, head	.1331	046/	0207	1003
40-49, 1 child	.1613ª	0533 ^b	.0478	0423
Married, head	.1015	.0555	.0470	.0423
40-49, 2+ children	.1656ª	0481 ^b	0907	3175ª
Married, head 50+,	.1050	.0.01	.0507	.51,5
no children	.1187ª	0122	0764 ^b	−.1637 ^b
Married, head 50+,		•		
1 child	.1704ª	0371	.0987	0405
Married, head 50+,				
2+ children	.1521ª	0281	.0960	6266 ^b

^a Significant at .05 level. ^b t-ratio greater than one.

TABLE A.10 STRUCTURE SIZE, RENTERS (ROOMS)

$Q_{2} = \beta_{0} (Y)^{\beta_{1}} (RR)^{\beta_{2}} (RA_{2})^{\beta_{3}}$			
	Income	Incremental Price of Adding Room	Incremental Price of Newer Unit
Life-Cycle Class	β ₁	β ₂	β ₃
Single, alone	.1859ª	1395 ^b	.3822 ^b
Single, with others	.0931a	1501 ^b	.2332
Separated, no children	.0602ª	1045^{b}	2118
Separated, children	.0756ª	.0969	2265
Married, head < 30, no children	.0949ª	2206ª	2374
Married, head < 30, 1 child	.0693°	.0821	0813
Married, head < 30, 2+ children	.1016ª	1091 b	.1343
Married, head 30-39, no children	.0926ª	0016	6535 ^b
Married, head 30-39, 1 child	.0627 ^b	.0925	.2149
Married, head 30-39, 2+ children	.1133ª	0370	.3211 ^b
Married, head 40-49, no children	.0612 ^b	.0313	.0795
Married, head 40-49, 1 child	.2220a	0555	.5946 ^b
Married, head 40-49, 2+ children	.1497ª	.1722	1433
Married, head 50+, no children	.1439ª	0842 ^b	2664
Married, head 50+, 1 child	.1796ª	0853	.9192
Married, head 50+, 2+ children	.0881	.4013	-1.8426 ^b

^aSignificant at .05 level. ^b *t*-ratio greater than one.

TABLE A.11 STRUCTURE AGE, RENTERS (YEARS)

$Q_3 = \beta_0 Y^{\beta_1} R^{\beta_2} (RA_2)^{\beta_3}$			
Life-Cycle Class	Income β ₁	Price of Standard Bundle β ₂	Incremental Price of Newer Unit β ₃
Single, alone	2681ª	1.3155ª	3.6048ª
Single, with others	3017^{a}	1.6290a	3.2968ª
Separated, no children	4136ª	.0027	6.2973ª
Separated, children	2555ª	.7652 ^b	2.7709ª
Married, head < 30, no children	4406ª	1710	2.7143ª
Married, head < 30, 1 child	3396 ^à	.9022ª	2.3530 ^a
Married, head < 30, 2+ children	−.1754 ^b	.1443	2.8617ª
Married, head 30-39, no children	2470 ^b	.8113 ^b	2.0560ª
Married, head 30-39, 1 child	1939ª	.8284ª	1.2645ª
Married, head 30-39, 2+ children	3767ª	.6404 ^b	1.9142 ^b
Married, head 40-49, no children	5100a	1.6080a	-1.7798
Married, head 40-49, 1 child	5147ª	-1.7267	6.5962ª
Married, head 40-49, 2+ children	5530ª	.9894 b	.9788
Married, head 50+, no children	3169ª	.8442ª	2.5582ª
Married, head 50+, 1 child	1448	2325	4.2427 ^b
Married, head 50+, 2+ children	1033	6696	10.1680ª

^a Significant at .05 level.

bt-ratio greater than one.

TABLE A.12 PROBABILITY STRUCTURE AGE POST-1940, RENTERS

$Q_4 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln R + \beta_3 \ln (RA_2)$				
Life-Cycle Class	Income β ₁	Price of Standard Bundle β ₂	Incremental Price of Newer Unit β3	
Single, alone	.1633ª	7529ª	8320ª	
Single, with others	.1315ª	-1.1085^{a}	3681 ^b	
Separated, no children	.1571ª	4614ª	5148 ^b	
Separated, children	.0743 ^b	5483 a	.0900	
Married, head < 30, no children	.1475°	3406ª	.3940	
Married, head < 30, 1 child	.1519ª	5525ª	4911 ^b	
Married, head < 30, 2+ children	.1175°	4131ª	.5840 ^b	
Married, head 30-39, no children	.0564	7247^{a}	2202	
Married, head 30-39, 1 child	.1608 ^b	−.3869 ^b	2808	
Married, head 30-39, 2+ children	.1809ª	1244	4120 ^b	
Married, head 40-49, no children	.1202b	2287 ^b	.0866	
Married, head 40-49, 1 child	.2061a	0756	.5630	
Married, head 40-49, 2+ children	.3077ª	−.3590 ^b	.3917	
Married, head 50+, no children	.1259ª	7412^{a}	.8451ª	
Married, head 50+, 1 child	.0950	-1.4871ª	2.5545ª	
Married, head 50+, 2+ children	.5367ª	−.7552 ^b	2.5840 ^b	

^aSignificant at .05 level. ^b t-ratio greater than one.

TABLE A.13 PROBABILITY STRUCTURE AGE POST-1960, RENTERS

$Q_5 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln R + \beta_3 \ln (RA_1)$			
Life-Cycle Class	Income β ₁	Price of Standard Bundle β ₂	Incremental Price of Newer Unit β ₃
Single, alone	.0885ª	5175ª	9128ª
Single, with others	.1173ª	5593ª	-1.1177ª
Separated, no children	.1476ª	0279	-2.3415^{a}
Separated, children	.1025ª	2591 ^b	−.9234 ^b
Married, head < 30, no children	.1963 a	.0307	6041 ^b
Married, head <30, 1 child	.1366ª	2378 ^b	7255 ^b
Married, head < 30, 2+ children	.0200	.0066	−.7785 ^b
Married, head 30-39, no children	.1151 ^b	1602	−.5038 b
Married, head 30-39, 1 child	.1247ª	−.2774 ^b	6131 ^b
Married, head 30-39, 2+ children	.1095ª	2588^{b}	2578
Married, head 40-49, no children	.2478ª	8307^{a}	-1.2141^{b}
Married, head 40-49, 1 child	.1322 ^b	.6814ª	-2.0196^{a}
Married, head 40-49, 2+ children	.1888ª	5187ª	.5559
Married, head 50+, no children	.1098ª	4539ª	3069
Married, head 50+, 1 child	.0417	.0506	8925
Married, head 50+, 2+ children	0463	1742	-2.8982 ^b

^aSignificant at .05 level. ^b t-ratio greater than one.