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APPENDIX B: DEMAND ESTIMATES FOR BLACK HOUSEHOLDS BY LIFE CYCLE

The following tables present the elasticities implied by the estimates of the demand equations for black households developed in Chapter 5, for each of six life-cycle classes. The form of the equations and the definition of independent and dependent variables are given in the text on pages 127 and 128.

TABLE B.1
PROBABILITY OF OWNERSHIP, BLACKS

$$Q_1 = \beta_0 + \beta_i \ln(Y) + \beta_2 \ln(P_0/R_0) + \beta_3 X_1 + \beta_4 X_2$$

	Elasticities at Mean		Submarket Classification Dummies	
Life-Cycle Group	Income (Y)	Price (P_0/R_0)	X_1	X_2
Single	.385[a]	−1.062[a]	−.131[a]	-
Separated	.831[a]	-	−.161[a]	−.246[a]
Married, head <35, no children	-	-	-	-
Married, head <35, with children	.916[a]	-	−.233[a]	−.085[b]
Married, head >35, no children	.378	−.225[a]	−.204[a]	−.118[b]
Married, head >35, with children	.421[a]	-	−.211[a]	-

Note: Omitted coefficients are insignificant at .20 level.
[a]Significant at .05 level.
[b]Significant at .05 to .20 level.

TABLE B.2
DWELLING-UNIT SIZE (NUMBER OF ROOMS); BLACKS

I. Owners

$$Q_2 = \beta_0 Y^{\beta_1} (P_R)^{\beta_2} (P_a)^{\beta_3} (P_1)^{\beta_4} e^{\beta_5 X_1} e^{\beta_6 X_2}$$

	Elasticities at Mean					
					Submarket Classification Dummies	
Life-Cycle Group	Income Y	Incremental Price of Room P_R	Incremental Price of Newer Unit P_a	Incremental Price of Larger Lot P_1	X_1	X_2
Single	.1123[a]	-	−.1686	-	-	.2080
Separated	.1168[a]	−.2582	-	-	-	-
Married, head <35, no children	(Sample Size Too Small)					
Married, head <35, with children	.1786[a]	-	-	-	-	-
Married, head >35, no children	.0614[a]	-	−.0350	-	-	-
Married, head >35, with children	.0824[a]	-	−.1853[a]	-	-	.0726

TABLE B.2 Concluded

II. Renters

$$Q_2 = \beta_0 Y^{\beta_1} (R_R)^{\beta_2} (R_a)^{\beta_3} e^{\beta_4 X_1} e^{\beta_5 X_2}$$

	Elasticities at Mean				
Life-Cycle Group	Income Y	Incremental Price of Room R_R	Incremental Price of Newer Unit R_a	Submarket Classification Dummies X_1	X_2
Single	.0807[a]	−.2154[a]	−.8738[a]	−.1423[a]	−.0944[b]
Separated	.0183[b]	-	−.2698[b]	-	-
Married, head <35, no children	-	−.2859[b]	−.1884[b]	-	−.1655[b]
Married, head <35, with children	.0223[b]	-	−.3101[a]	-	-
Married, head >35, no children	.1377[a]	−.4343[a]	−.4994[a]	−.1311[a]	−.0412[b]
Married, head >35, with children	.0699[a]	-	-	-	−.0595[b]

Note: Omitted coefficients are insignificant at .20 level.

[a]Significant at .05 level.

[b]Significant at .05 to .20 level.

TABLE B.3
STRUCTURE AGE, OWNERS

Equation 1: $Q_3 = \beta_0 (Y)^{\beta_1} (P_0)^{\beta_2} (P_a)^{\beta_3} (P_1)^{\beta_4} e^{\beta_5 X_e}$

Equation 2: $Q_4 = \beta_0 + \beta_1 \ln (Y) + \beta_2 \ln (P_0) + \beta_3 \ln (P'_a) + \beta_4 \ln (P_1) + \beta_5 X_1 + \beta_6 X_2$

Equation 3: $Q_5 = \beta_0 + \beta_1 \ln (Y) + \beta_2 \ln (P_0) + \beta_3 \ln (P_a) + \beta_4 \ln (P_1) + \beta_5 X_1 + \beta_6 X_2$

	Elasticities at Mean					
Life-Cycle Group	Income Y	Price of Standard Bundle P_0	Incremental Price of Newer Unit P_a or P'_a	Incremental Price of Larger Lot P_1	Submarket Classification Dummies X_1	X_2
Equation 1: Structure Age:						
Single	−.1311[b]	-	-	1.4330[b]	.5417[a]	.9112[a]
Separated with children	−.1089[b]	-	-	.9476[b]	.1741[b]	-
Married, head <35, no children		(Sample Size Too Small)				
Married, head <35, with children	−.5417[b]	1.3620[b]	-	-	-	.2065[b]
Married, head >35, no children	−.1412[b]	.6851[a]	−.3120[b]	-	.5148[a]	.3177[b]
Married, head >35, with children	−.1698[b]	.7236[a]	−.1460[b]	-	.5097[a]	.2050[b]
Equation 2: Probability Age < 1939:						
Single	-	-	-	-	.6231[a]	.9639[a]
Separated with children	.1401[b]	-	-	1.765[b]	.2176[b]	.2461[b]
Married, head < 35, no children		(Sample Size Too Small)				
Married, head <35, with children	−1.8690[b]	1.653[b]	-	-	.1077[b]	.3676[b]

Married, head >35, no children	-	.316[b]	-	.681[b]	.3746[b]	.4054[a]
Married, head >35, with children	−.2112[b]	1.075[b]	-	-	.2935[b]	.3199[a]
Equation 3: Probability Age 1960-65:						
Single	-	-	-	-	−.2647[a]	−.3322[a]
Separated with children	.698[b]	-	-	4.901[b]	−.1528[b]	
Married, head <35, no children		(Sample Size Too Small)				
Married, head <35, with children	-	-	-	-	−.6227[b]	−.6971[a]
Married, head >35, no children	.265[b]	−.541[b]	-	-	−.2221[b]	−.1282[b]
Married, head >35, with children	.271[b]	−1.733[b]	-	-	−.3298[a]	−.2458[a]

Note: Omitted coefficients are insignificant at .20 level.

[a]Significant at .05 level.

[b]Significant at .05 to .20 level.

TABLE B.4
STRUCTURE AGE, RENTERS

Equation 1: $Q_3 = \beta_0 (Y)^{\beta_1} (R_0)^{\beta_2} (R_a)^{\beta_3} e^{\beta_4 X_1} e^{\beta_5 X_2}$
Equation 2: $Q_4 = \beta_0 + \beta_1 \ln (Y) + \beta_2 \ln (R_0) + \beta_3 \ln (R'_a) + \beta_4 X_1 + \beta_5 X_2$
Equation 3: $Q_5 = \beta_0 + \beta_1 \ln (Y) + \beta_2 \ln (R_0) + \beta_3 \ln (R_a) + \beta_4 X_1 + \beta_5 X_2$

	Elasticities at Mean				
Life-Cycle Group	Income Y	Price of Standard Bundle R_0	Incremental Price of Newer Unit R_a or R'_a	Submarket Classification Dummies X_1	X_2
Equation 1: Structure Age:					
Single	−.4961[a]	1.5120[a]	.9501[a]	.5886[a]	.4775[a]
Separated with children	−.2104[a]	.3199[b]	1.2900[a]	.7943[a]	.7433[a]
Married, head <35, no children	-	1.2930[b]	-	-	-
Married, head <35, with children	-	1.8840[a]	-	.8898[a]	.5139[a]
Married, head >35, no children	-	.6753[b]	3.3530[a]	.5265[a]	.7169[a]
Married, head >35, with children	-	.3571[b]	-	.7315[a]	.5620[a]
Equation 2: Probability Age < 1939:					
Single	−.2545[a]	1.431[a]	.946[a]	.3295[b]	.2363[a]
Separated with children	−.1355[b]	1.083[a]	.510[b]	.4227[a]	.3980[a]

Married, head <35, no children	-	1.568[a]	1.309[b]	.1022[b]	.0917[b]
Married, head <35, with children	-	1.637[a]	.392[b]	.5343[a]	.3055[a]
Married, head >35, no children	-	.538[a]	1.087[b]	.3864[a]	.3772[a]
Married, head >35, with children	-	.735[a]	.225[b]	.3907[a]	.3080[a]
Equation 3: Probability Age 1960-65:					
Single	-	−4.024[a]	−4.975[a]	−.0991[a]	−.0207[b]
Separated with children	-	−3.287[a]	-	−.1308[a]	−.0921[b]
Married, head <35, no children	−.112[b]	−.906[a]	−10.972[a]	−.1349[a]	−.0923[b]
Married, head <35, with children	−.226[b]	-	−1.901[b]	−.2419[a]	−.1876[a]
Married, head >35, no children	-	-	−2.982[a]	−.1272[a]	−.0433[b]
Married, head >35, with children	-	-	−2.528[b]	−.1425[a]	−.1886[a]

Note: Omitted coefficients are insignificant at .20 level.

[a]Significant at .05 level.

[b]Significant at .05 to .20 level.

TABLE B.5
LOT SIZE, OWNERS

Equation 1: $Q_6 = \beta_0 Y^{\beta_1} (P_0)^{\beta_1} (P_a)^{\beta_2} (P_1)^{\beta_3} e^{\beta_4 X_1} e^{\beta_5 X_2}$

Equation 2: $Q_7 = \beta_0 + \beta_1 \ln Y + \beta_2 \ln P_0 + \beta_3 \ln P_a + \beta_4 \ln P_1 + \beta_4 X_1 + \beta_5 X_2$

	Elasticities at Mean					
Life-Cycle Group	Income Y	Price of Standard Bundle P_0	Incremental Price of Newer Unit P_a	Incremental Price of Larger Lot P_1	Submarket Classification Dummies X_1	X_2
Equation 1: Lot Size:						
Single	.1189[b]	-	-	−.5341[b]	−.1097[b]	−.2402[b]
Separated with children	.1639[b]	-	.2458[b]	−.7442[b]	−.4028[b]	−.8647[b]
Married, head <35, no children		(Sample Size Too Small)				
Married, head <35, with children	.1009[b]	-	.4364[b]	−.2349[b]	−.3713[b]	−.1535[b]
Married, head >35, no children	-	-	.3101[b]	-	−.3877[a]	−.2642[a]
Married, head >35, with children	.0288[b]	-	-	−.1156[b]	−.0832[b]	−.0810[b]
Equation 2: Probability Lot < .2 acre:						
Single	−.0805[b]	-	-	.595[b]	.0479[b]	.1133[b]
Separated with children	−.0856[b]	-	-	.393[b]	.1900[b]	.4078[b]
Married, head <35, no children		(Sample Size Too Small)				
Married, head <35, with children	−.1128[b]	.2680[b]	−.596[b]	.365[b]	.3933[b]	.1546[b]
Married, head >35, no children	-	.1015[b]	−.323[a]	—	.2229[a]	.1655[a]
Married, head >35, with children	−.0491[b]	-	-	.208[b]	.0917[b]	.0902[b]

Note: Omitted coefficients are insignificant at .20 level.

[a] Significant at .05 level.

[b] Significant at .05 to .20 level.