

Black-White Appreciation of Owner Occupied Homes in Upper Income Suburban
Integrated Communities: The Cases of Maplewood and Montclair, New Jersey

Douglas Coate
Department of Economics
Rutgers University
360 King Boulevard
Newark, New Jersey 07102
(973) 353-5259
coate@rutgers.edu

Richard Schwester
Department of Public Management
John Jay College, The City University of New York
445 West 59th Street
New York, New York 10019
(212) 237-8075
rschwester@jjay.cuny.edu

RUTGERS UNIVERSITY NEWARK WORKING PAPER #2008-001

Abstract

The purpose of this paper is to examine black-white differences in housing appreciation in northern New Jersey, with particular emphasis on the communities of Montclair and Maplewood in the 1970 to 2000 period. We find that home appreciation at the block group level in these communities was inversely related to changes in the black population. The effect of changes in the proportion of the population that was black on home appreciation was similar to the effects of changes in black population at the census tract level in the northern New Jersey region as a whole. These high income communities with award winning school districts and well maintained housing stocks were not immune from the effects of race on home appreciation.

JEL code: R21 Housing Demand

Key words: Black-white house appreciation

Black-White Appreciation of Owner Occupied Homes in Upper Income Suburban Integrated Communities: The Cases of Maplewood and Montclair, New Jersey

1. Introduction

The purpose of this paper is to examine black-white differences in housing appreciation in northern New Jersey, with particular emphasis on the communities of Montclair and Maplewood in the 1970 to 2000 period. Montclair and Maplewood are upper income, suburban communities located on rail lines that run into Newark's city center and continue ten additional miles to New York City. According to the 2000 Census, Montclair's population, median family income, and median house value was 39,068, \$96,252, and \$317,500. Montclair's 2000 population was 60 percent white, 31 percent black, and six percent Hispanic. Maplewood's 2000 population, median family income, and median house value were 23,868, \$92,724, and \$222,700. Maplewood's population mirrored Montclair's, as it was 60 percent white, 33 percent black, and five percent Hispanic. Median family income in the state of New Jersey was \$65,370, second highest in the United States. *Money Magazine* (2005) recognized both Montclair and Maplewood as "best places to live" in New Jersey. Maplewood's high school received the prestigious Blue Ribbon award from the U.S. Department of Education for the 1992-93 school year. Montclair public schools received the Silver Governor's Award for Overall Performance Excellence by the Quality New Jersey Organization in 2005 and received Bronze Awards in 2001 and 2002. The housing stocks in both municipalities are very well maintained.¹

The motivation for studying race and housing appreciation in the communities of Montclair and Maplewood is that such communities may represent excellent

opportunities for black home appreciation or for black-white home appreciation equality. These communities are upper income, with award winning schools and well maintained housing stocks, and are arguably magnets for black and white families who have the means and the desire to live in racially integrated communities. Some previous research has found lower rates of home appreciation for black owned homes compared to white owned homes in the U.S., or have found an inverse relationship between the proportion of a neighborhood population that is non white (or the change in that proportion) and neighborhood home values. It has been argued further that differences in home appreciation contribute significantly to differences in black-white homeownership rates and to the black-white wealth gap (Blau and Graham 1990; Oliver and Shapiro 1995; Long and Caudill 1992; Flippen 2004).

2. Previous Literature

Flippen's (2004) work is the most recent. Using data from the Health and Retirement Study and from the 1970, 1980, and 1990 census, she found that the level of black population in the census tract and changes in the level of the black population were negatively related to housing unit appreciation, holding constant housing unit characteristics and socioeconomic status, region, and census tract population. The addition of poverty controls mitigated the level effects of black population (but not the change in levels) except for cases of substantial segregation. For example, homes located in neighborhoods at least 65 percent black were worth 26 percent less than comparable homes purchased in all white neighborhoods. Macpherson and Sirmans (2001) also studied the levels of neighborhood racial composition and changes in those levels on

home price appreciation. They used repeat sales data from 1970 to 1997 in the Tampa and Orlando regions of Florida and census tract data. For Tampa, the authors found changes in the level of black population were negatively related to appreciation and that the level of the Hispanic population and the change in the Hispanic population were both positively related to home price appreciation. Flippen (2004) also found some evidence of a positive Hispanic affect on home prices appreciation, as did Holmes and James (1996) for the Houston housing market. For Orlando, the level and changes in the level of black population were negatively related to home price appreciation, while the level of Hispanic population was positively related to appreciation. Change in the level of Hispanic population was negatively related to appreciation in Orlando. The level and change in level effects were small. One standard deviation changes in these variables reduced home values less than one percent even without other controls.

Devaney and Rayburn (1993) also studied levels and changes in levels of neighborhood racial composition on home values. They found lower appreciation in neighborhoods experiencing substantial reductions in white population in the city of Memphis and portions of Shelby County, Tennessee, 1970-1987. These effects were independent of the initial levels of white population. Kim (2000) analyzed home appreciation in Milwaukee neighborhoods, 1971-1993. He allowed for black population level effects and allowed for black population change effects to vary with the size of the change. His results indicated that an all white Milwaukee neighborhood would have experienced about six percent annual appreciation from 1971-1993 compared to four percent for a neighborhood 50 percent minority.

Coate and Vanderhoff (1993) using the annual housing survey data did not find evidence of differences in black-white appreciation rates in the U.S., 1974-1983. Keil and Carson (1990), using the same data set for the ten largest metropolitan areas, found that white owned homes appreciated four percent more per year, 1974-1979, but one percent less per year 1979-1983, with the latter effect not statistically significant. One criticism of these approaches is that race and other independent variables were collected for the entire SMSA and not the immediate neighborhood of the respondent (Coate and Vanderhoff) or were not used at all (Keil and Carson (1990)).² The same criticism could also be applied to Long and Caudill (1992), who reported from census data very similar appreciation rates for suburban black and white owned homes, husband and wife present, between 1970 and 1980.

3. Data and Results

Montclair and Maplewood are located near the population center of northern New Jersey, a housing market that includes 14 counties and is approximately 100 miles long north to south and 50 miles wide east to west.³ We begin the empirical work with an analysis of race and home appreciation in this area. Census figures show the population of these counties grew from 6,080,000 to 6,660,000 between 1990 and 2000. The black population grew from 801,000 to 864,000 in this period. The Hispanic population grew from 649,000 to 980,000, accounting for almost 60 percent of the total population growth over the decade. Census tract data available from the U.S. Census are used to estimate appreciation models for this region motivated by the literature reviewed in section 2. About 85 percent of the tracts in the 14 counties were common to the 1990 and 2000

Censuses yielding a sample of 1241 tracts. The decade of the 1990s was a period of slow nominal growth in housing prices in northern New Jersey. Real appreciation was -18 percent over the decade according to the census tract data, using the CPI for the U.S. as the deflator.

Regression model 1 in Table 1 explains the percentage change in real appreciation in census tracts with the percentage change in median family income, the percentage change in population, the change in percent of the population that is black, the change in the percent of the population that is Hispanic, and 13 county dummies. Results for variables measuring changes in median number of rooms, in the poverty rate, in the percent of the adult population with a four year college degree or higher, and in the age of the housing stock were included in the analysis but did not have effects independent of the aforementioned variables.⁴ The results show a one standard deviation change of 5 in the variable percentage black would have changed the real appreciation rate by -4.35 $(-.87*5)$. This is about 20 percent of the sample mean appreciation of -18 percent. A change in percentage Hispanic of the same amount would change the real appreciation rate by -2 $(-.43*5)$.

There is support in the literature for allowing the effects of changes in minority population on housing appreciation to be affected by levels of minority population. Thus, in model 2 the percent of the tract population black in 1990 and its square and the percent of the tract population Hispanic in 1990 and its square are included as explanatory variables. The squared terms allow the effects of levels to change as levels change. The results indicate that a tract five percent black in 1990 that increased to 10 percent black in 2000 would experience an appreciation six percentage points lower as a result $(-.79*(10-$

$5) - .47(5) + .0051 * 5^2 = -6$. A tract 30 percent black in 1990 that increased to 35 percent black in 2000 would experience an appreciation 13 percentage points lower ($-.79 * (35 - 30) - .47(30) + .0051 * 30^2 = -13$). The same 5 percent change in black population has a more detrimental effect on the appreciation rate the higher the 1990 black population. The Hispanic population effects are different. The same exercise gives -.6 percentage points for the 5 to 10 change ($-.49 * (10 - 5) + .38 * (5) - .0029 * 5^2$) and positive 6 for the change from 30 to 35 ($-.49 * (35 - 30) + .38 * (30) - .0029 * 30^2$). The large increase in Hispanic population in northern New Jersey and the desire of Hispanics to live with other Hispanics combined to increase housing values in areas that became more Hispanic in the 1990s. Illegal Hispanic immigration would be complementary to these trends (Flippen 2004).⁵

Insert Table 1 here

While the racial composition of the populations of Montclair and Maplewood are now similar, they differed markedly in 1970. Maplewood was 2 percent black in 1970 and Montclair was 26 percent black. Maplewood is divided into six census tracts, and it is in the two eastern tracts (196 and 197) where the growth in black population has been most concentrated. The population of tracts 196 and 197 were less than one percent black in 1970 and over 50 percent black in 2000 (see Table 2).

Insert Table 2 here

In Table 3, regressions 1 and 2, 1990 and 2000 census data for Montclair and Maplewood are used to estimate models similar to the census tract analysis for northern New Jersey. In regression 1, real appreciation in census tract block groups for owner occupied homes, 1990-2000, is explained by the percent of the 1990 block group population that is black and its square, the percentage change in the black population over the decade, and a Montclair dummy. Using the results to examine a 5 percentage point increase in the black population from 5 to 10 percent and from 30 to 35 percent yields a -5 and -15 percent change in real appreciation, values that are very near the previous calculations for northern New Jersey. In regression 2, interactions of the independent variables with the Montclair dummy show no important differences in coefficients between the municipalities.

In regressions 3 and 4, the model is estimated over the 1970-2000 period. Results for the square of the level of the black population in 1970 did not add to the model and are not reported. The results in regression 3 indicate a block group that increased from 5 to 10 percent black and 30 to 35 percent black during the period would experience a -8 and -18 percentage point changes in real appreciation as a result. Average block group real appreciation, 1970-2000, was 96 percent. The 50 percent change in percent black that occurred in Maplewood tracts 196 and 197 would imply a 65 percentage point lower appreciation rate according to the model. A Table 2 comparison of Maplewood tracts 196 and 197 with Maplewood tracts 194 and 199 shows 1970-2000 real appreciation gains of about 40 percent (\$115,000 to \$160,000) in the former compared to about 110 percent in the latter (\$186,000 to \$390,000). Tracts 194 and 199

were about 3 percent black in 1970 and about 4 percent black in 2000. These figures are unweighted averages of the block group data in Table 2.

It is likely that differences in homeowner improvement rates by value of the home lead to some overstatement of the black-white appreciation differences in Montclair and Maplewood. Evidence of this comes from assessor data. Many New Jersey communities resist property tax revaluations, and Montclair and Maplewood are not exceptions. Maplewood revalued or adjusted assessed values to 100 percent of market value in 1981 and 2001. Montclair revalued in 1986 and 2006. The latter data were not available at the time this research was conducted. Approximately 100 properties were sampled from the assessor data in Maplewood in tract 197 block group 2 (relatively low valued properties) and in tract 199 block group 2 (relatively high valued properties). Assessor valuations were close to block group means from the 1980 and 2000 census, which are self reported. Keil and Carson (1992) provide literature in support of the accuracy, on average, of homeowner self reported valuations. The assessor data did reveal improvements in about forty percent of the higher valued properties between 1981 and 2001 and improvements in less than 5 percent of the lower valued properties. That is, the breakdown of assessed valuation between land value and improvement value showed an increase in the latter category in about 40 percent of the properties in tract 199, block group 2 between 1981 and 2001. The average increase in improvement value was about 5 percent among those properties with improvements. This is not large compared to the overall home appreciation rate over 20 years. The actual difference in improvements made in relatively high valued properties and in relatively low valued properties will be less than the assessor data indicates to the extent owners of lower

valued properties were less likely to use contractors that obtain the permits required by the municipality and trigger a reassessment. Belsky et al. (2005) summarizes the data on household income and maintenance and improvement expenditures as a share of house value from the 2001 American Housing Survey. Among those with incomes between \$40,000 and \$60,000, the median amount spent expressed as a share of \$1,000 of house value was 3.2 percent over two years as compared to over five percent for those earning between \$80,000 and \$120,000.

4. Conclusion

White Americans hold five to ten times the wealth of black Americans (Barsky et al. 2002; Wolff 1998). Differences in home equity contribute significantly to this wealth gap. Black homeownership rates are two-thirds of whites, as is the ratio of the value of black owned homes to the value of white owned homes (Wolf 1998; Coate and Vanderhoff 1993). One reason for lower home investment by blacks might be lower expected rates of home appreciation. Although the research on black-white home appreciation differences in a multivariate context is not unanimous, a number of studies find significantly lower appreciation rates for blacks, particularly in neighborhoods with substantial black populations. In this study, we have examined black-white appreciation differences at the block group level in two upper income integrated suburban communities in New Jersey, Montclair and Maplewood. We argue that these communities may present excellent opportunities for black home appreciation or for black-white home appreciation equality. Both communities are upper income, with award winning schools and well maintained housing stocks, and are arguably magnets for

black and white families who have the means and desire to live in racially integrated communities. We find, however, in the 1970-2000 period and in the 1990-2000 period, that home appreciation at the block group level in these communities was inversely related to changes in the black population. The effect of changes in the black population on home appreciation in block groups in these communities in 1990-2000 was similar to the effects of changes at the census tract level in the northern New Jersey region as a whole; that is, these high income communities with award winning school districts and well maintained housing stocks were not immune from the effects of race on home appreciation. Furthermore, as Table 2 indicates, these relatively small suburban communities exhibit a large degree of segregation. If whites have a preference to live in predominately white neighborhoods (Bajari and Kahn 2001), robust appreciation in suburban neighborhoods with a significant black population will depend initially on substantial demand by other blacks or other minorities to locate to that area. This did not occur in Maplewood and Montclair. However, it is unlikely that differential appreciation rates between predominately white neighborhoods and neighborhoods with substantial black populations in upper income municipalities with well maintained housing stocks can last very long. At some housing price differential white households will be attracted back to areas with substantial black populations and appreciation rates will no longer favor the predominately white areas.⁶

5. Notes

¹The authors made a number of visits to each municipality in 2006 and observed all housing units.

²See Kim (2000). The emphasis of Keil and Carson (1990) was not on isolating white-non white appreciation differences.

³This 14 county designation is by the authors. Although the assumption of a single housing market is not critical to the research, all 14 counties include a substantial number of commuters to New York City. The counties are Bergen, Essex, Hudson, Hunterdon, Middlesex, Passaic, Somerset, Sussex, Morris, Union, Warren, Ocean, Monmouth, and Mercer.

⁴The justification for the model is that if levels of housing prices are determined by levels of explanatory variables, then changes in housing prices (appreciation) should be determined by changes in the levels of the explanatory variables. Also, explanatory variables in a level model that can be assumed to be constant over the time period, such as many neighborhood amenities, fall out of the appreciation model.

⁵Flippen (2004, p. 1544) writes, "A key element of Hispanic housing appreciation is the effect of immigration on price changes. Population pressures in areas of high immigrant settlement act to raise property values, which gives areas with a growing Hispanic population a substantial boost. Thus it seems that the 1990s for Hispanic neighborhoods are roughly analogous to the 1950s and 1960s for black neighborhoods, when the northern black population was growing rapidly, driving up prices in the ghetto and 'transition' areas." Flippen, however, questions the long term impact of Hispanic population concentrations on home appreciation.

⁶There is some evidence that this may have occurred in Maplewood tracts 196 and 197. The neighborhood scout website (<http://www.neighborhoodscout.com/>) shows the ratio of the median house value in tracts 194 and 199 to the median house value in tracts 196 and 197 to be 2.40 in 2006. This is the same ratio that existed for average house values in these areas in 2000 from census data. The neighborhood scout data is based on mortgage transaction data from Fannie Mae and Freddie Mac. The neighborhood scout 2006 median value for tracts 196 and 197 was \$230,000, while for tracts 194 and 199 it was \$550,000. Thus, appreciation rates were roughly equal in these areas in the 2000-2006 period of substantial appreciation.

6. References

- Bajari, P., & Kahn, M. (2001). Why do blacks live in the cities and whites live in the suburbs? Stanford University, Department of Economics, Working Papers 00007.
- Barsky, R. B., Bound, J., Charles, K. & Lupton, J.P. (2002). Accounting for the black-white wealth gap: A nonparametric approach." *Journal of the American Statistical Association*. 97 (459): 663-673.
- Belsky, E.S., Retsinas, N.P. & Duda, M. (2005). The financial returns to low-income homeownership. Joint Center for Housing Studies, Harvard University. W05-9.
- Coate, D. & Vanderhoff, J. (1993). Race of the homeowner and appreciation of single-family homes in the United States. *Journal of Real Estate Finance and Economics* 7: 205-12.
- Devaney, M. & Rayburn, W. (1993). Neighborhood racial transition and housing returns: A portfolio approach. *The Journal of Real Estate Research*. 8(2): 239-252.
- Flippen, C. (2004). Unequal returns to housing investments? A study of real housing appreciation among black, white, and Hispanic households. *Social Forces*. 82(4): 1523-1551.
- Holmes, A. & James, J.F. (1996) Discrimination, lending practices, and housing values:

- Preliminary evidence from the Houston market. *The Journal of Real Estate Research*. 11(1): 25-37.
- Kiel, K.A. & Carson, R.T. (1990). An examination of systematic differences in the appreciation of individual housing units. *The Journal of Real Estate Research*. 5(3): 301-318.
- Kim, S. (2000) Race and home price appreciation in urban neighborhoods: Evidence from Milwaukee, Wisconsin." *The Review of Black Political Economy*. Fall, 9-28.
- Long, J. & Caudill, S. (1992). Racial differences in home ownership and housing wealth: 1970-1986. *Economic Inquiry* 30: 83-100.
- Macpherson, D.A. & Sirmans, G.S. (2001). Neighborhood diversity and housed price appreciation. *Journal of Real Estate Finance and Economics*. 22(1): 81-97.
- Money Magazine*. (2005). Best places to live. Retrieved on September 28, 2006, from <http://money.cnn.com/magazines/moneymag/bplive/2005/index.html>.
- New Jersey Monthly*. (2006). Top public high schools in New Jersey. September. Retrieved on September 20, 2006, from <http://www.njmonthly.com/topschools/hssearch.html>.
- Oliver, M. L. & Shapiro, T.M. (1995). *Black Wealth / White Wealth*. New York: Routledge.
- Pandey, S. & Coulton, C. (1994). Unraveling neighborhood change using two-wave panel analysis: A case study of Cleveland in the 1980s. *Social Work Research* 18: 83-96.
- Wolff, Edward N. (1998). Recent trends in the size distribution of household wealth. *Journal of Economic Perspectives*, 12(3): 131-50.

Table 1
Results of Regressing Real Appreciation of Owner Occupied
Homes on Measures of Black and Hispanic Population,
Northern N.J. Census Tracts, 1990-2000

Variable	Model 1		Model 2	
	Coefficient	t-value abs. value	Coefficient	t-value abs. value
pctchginc	0.14	4.58	0.15	4.74
chgpctblk	-0.87	9.31	-0.79	7.77
chgpcthis	-0.43	5.31	-0.49	5.81
pctchgpop	0.08	4.24	0.07	4
pctblk90			-0.47	5.24
pctblk90sq			0.0051	4.99
pcthis90			0.38	3.35
pcthispsq90			-0.0029	1.99
cty1	-0.02	0.66	-0.02	1.01
cty2	0.07	3.27	0.06	2.61
cty3	-0.03	1.36	-0.08	3.32
cty4	0	0	0	0.01
cty5	-0.03	1.09	-0.02	0.81
cty6	-0.09	3.82	-0.08	3.66
cty7	-0.07	2.81	-0.06	2.34
cty8	0	0.11	0	0.04
cty9	-0.09	3.12	-0.09	3.12
cty10	0.03	1.15	0.01	0.48
cty11	-0.01	0.44	-0.01	0.26
cty12	-0.11	3.49	-0.12	3.57
cty13	-0.06	1.47	-0.06	1.5
_cons	-0.14	7.58	0.14	6.71
n	1241		1241	
R sq.	0.18		0.21	

Variable definitions and (means, s.d.) follow. All percentage changes are from levels in the 1990 census to levels in the 2000 census. pctchginc is percentage change in real median family income (1.40, 17.29); chgpctblk is percentage change in percent of population black (.88, 5.37); chgpcthis is percentage change in percent of population Hispanic (4.00, 6.44); pctchgpop is percentage change in population (10.91, 28.92); pctblk90 is percent of the population black in 1990 (15.91, 26.76); pcthis90 is percent of the population Hispanic in 1990 (12.32, 17.78). The dependent variable is real appreciation in median values of owner occupied homes (-17.63, 18.80). The unit of observation is the census tract. Northern New Jersey is comprised of 14 counties (cty).

Table 2
Real and Nominal Average Home Values and Black Population, Montclair and Maplewood New Jersey, by
Census Tract Block Group 1970 and 2000

Census Tract	Block Group	Percent Black 1970	Nominal Value 1970	Real Value 1970 (2000\$)	Percent Black 2000	Nominal Value 2000	Real Value Percentage Change 1970-2000
Montclair							
161	1	0.7	38,565	182,471	3.01	389,974	114
161	2	0.42	36,028	170,467	2.46	399,112	134
161	3	0.31	38,714	183,176	3.84	336,478	84
161	4	4.6	32,980	156,045	13.33	291,319	87
162	1	0.92	42,949	203,214	11.99	370,199	82
162	2	0.45	48,836	231,068	7.00	450,000	95
162	3	0.68	40,264	190,509	5.46	399,204	110
162	4	0	41,094	194,437	2.02	506,885	161
163	1	0	37,226	176,135	8.77	339,021	92
163	2	0	32,385	153,230	4.00	380,576	148
163	3	0.44	44,365	209,913	4.07	401,832	91
163	4	0.69	33,646	159,196	3.31	357,205	124
164	1	2.26	28,984	137,138	6.83	321,177	134
164	2	0.38	40,433	191,309	2.95	484,249	153
164	3	12	35,396	167,476	12.82	394,262	135
164	4	1.6	52,662	249,171	6.30	686,773	176
165	1	24	27,802	131,545	23.92	256,539	95
165	2	9.3	31,400	148,569	15.13	313,158	111
165	3	5.12	25,456	120,445	25.29	228,993	90
165	4	4.92	33,247	157,308	8.22	400,386	155
165	5	7.73	33,146	156,831	13.05	388,168	148
166	1	70	16,950	80,199	63.18	150,000	87

166	2	33.13	22,248	105,267	36.02	229,375	118
166	3	57.04	18,871	89,288	48.87	188,451	111
167	1	15.85	16,941	80,156	64.59	112,000	40
167	2	53.79			56.84	155,000	
167	3	40.28	21,076	99,721			
168	1	76.25	16,942	80,161	72.80	225,000	181
168	2	7.87			26.00	180,926	
168	3	16.6	19,500	92,264	18.38	213,750	132
168	4	18.5	25,749	121,832	23.26	188,826	55
169	1	1.4	48,400	229,005	8.54	663,944	190
169	2	30.1	42,472	200,957	40.73	456,250	127
169	3	3.1	48,543	229,682	18.24	614,242	167
170	1	48.6	27,085	128,153	52.41	263,559	106
170	2	38.5	31,966	151,247	53.03	310,440	105
170	3	3.42	38,847	183,805	20.33	244,391	33
171	1	93	15,866	75,070	70.48	142,257	89
171	2	96	20,363	96,348	87.61	209,412	117
172	1	91	25,051	118,529	75.32	222,376	88
172	2	94	19,023	90,007	89.75	174,369	94
172	3	79.9	25,080	118,666	80.10	212,433	79
172	4	86.9	22,532	106,610	79.24	244,614	129
Maplewood							
194	1	4.22	34,730	164,325	7.36	406,336	147
194	2	0.76	38,050	180,034	4.90	329,169	83
194	3	3.6	50,700	239,887	4.25	461,674	92
195	1	0.09	35,570	168,300	22.52	280,422	67
195	2	0.72	31,360	148,380	11.15	247,272	67
195	3	1.53	35,750	169,151	7.34	307,500	82
195	4	0.65	33,080	156,518	8.21	285,223	82
195	5	0	30,320	143,459	19.53	227,151	58
196	1	0.79	24,540	116,111	64.39	150,895	30

196	2	1.17	23,910	113,130	58.71	142,792	26
196	3	0	33,230	157,228	35.12	197,667	26
196	4	0	31,190	147,576	44.92	255,563	73
196	5	1.76	27,030	127,893	50.09	158,103	24
197	1	0.37	23,040	109,014	62.07	158,485	45
197	2	0	21,708	102,712	61.44	127,183	24
197	3	0.51	20,732	98,094	40.93	146,898	50
197	4	0	22,124	104,680	47.84	136,205	30
197	5	0	20,777	98,307	54.52	127,349	30
198	1	0.29	31,951	151,176	20.87	254,961	69
198	2	1.15	28,435	134,540	17.12	244,615	82
198	3	24.1	25,150	118,997	48.91	173,997	46
199	1	4.4	28,916	136,816	1.33	253,104	85
199	2	0.1	37,101	175,544	3.30	385,543	120
199	3	5	46,896	221,889	3.00	491,314	121

Real value 1970 in 2000 dollars.

Table 3
Results of Regressing Real Appreciation of Owner Occupied Homes on Measures of Black Population, Census Tract Block Groups, Maplewood and Montclair, N.J., 1990-2000 and 1970-2000

Variable	Model 1 1990-2000		Model 2 1990-2000		Variable	Model 3 1970-2000		Model 4 1970-2000	
	Coef.	t value abs. value	Coef.	t value abs. value		Coef.	t value abs. value	Coef.	t value abs. value
pctblk90	-0.58	3.15	0.16	0.19	pctblk70	-0.40	2.76	-0.60	0.47
chpctbk9000	-0.54	5.47	-0.66	4.44	chpctbk7000	-1.29	5.51	-1.24	4.58
Montclair	-0.06	1.90	-2.23	0.37	Montclair	28.73	9.27	31.78	2.51
pctblk90sq	0.005	2.38	-0.01	0.51	pctblk70mc			0.16	0.12
chpctbk9000mc			-0.78	0.89	chpctbk7000mc			-0.29	0.5
pctblkchgmc			0.2	0.84	_cons	100.83	11.49	99.76	9.74
pctblk90sqmc			0.02	0.79					
_cons	0.02	0.62	-1.51	0.28					
n	64		64			64		64	
R sq.	0.44		0.45			0.55		0.56	

Variable definitions and (means, s.d.) follow. pctblk90 is percent of the population black in 1990 (23.24,26.38); chpctbk9000 is percentage change in percent of population black, 1990-2000 (7.17,15.18); Montclair is a dummy variable identifying Montclair observations (.64,.48); mc at the end of a variable name indicates an interaction with the Montclair dummy variable; pctblk70 is percent of the population black in 1970 (17.66, 28.84); chpctbk7000 is percentage point change in percent of population black, 1970-2000 (12.52, 19.65);. The dependent variable is real appreciation in median values of owner occupied homes, 1990-2000 (-12.39, 13.35) or 1970-2000 (95.66, 42.52). The unit of observation is the census tract block group.