

I. Appendix Tables

Appendix Table 1: CBSA-Level Annualized Share of Total Housing Stock Added Over Time

CBSA	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020	2020-2023
Atlanta	6.73	6.96	4.78	4.42	2.97	3.17	1.11	0.58
Austin	5.78	6.37	7.46	5.65	3.39	4.24	3.40	1.92
Boston	2.07	2.30	1.61	1.13	0.59	0.75	0.79	0.23
Charlotte	6.01	5.25	3.47	3.08	3.14	3.50	1.83	0.96
Chicago	3.42	2.72	1.57	0.56	1.00	0.97	0.39	0.13
Cleveland	3.89	2.53	1.02	0.35	0.61	0.49	0.13	0.08
Dallas	8.31	5.98	4.37	4.06	1.95	2.52	1.79	0.94
Denver	7.53	4.85	5.71	2.42	2.01	1.97	1.47	0.69
Detroit	4.44	2.49	1.39	0.45	0.79	0.50	0.08	0.24
Houston	8.63	5.93	6.97	2.26	1.56	2.83	1.93	1.04
Las Vegas	22.85	14.63	10.49	6.64	7.65	5.01	0.92	0.66
Los Angeles	7.81	4.10	1.92	1.29	0.50	0.60	0.51	0.29
Miami	14.93	7.58	7.06	2.86	1.55	1.46	0.72	0.27
Nashville	5.59	5.36	3.85	2.71	2.42	2.29	1.91	1.33
New York	2.90	2.36	0.74	0.56	0.68	0.62	0.60	0.21
Orlando	12.70	6.61	7.72	6.02	3.04	3.79	1.55	1.00
Philadelphia	3.41	2.43	1.54	0.91	0.69	0.67	0.63	0.27
Phoenix	14.93	7.92	9.06	5.58	3.25	3.51	1.04	0.76
Raleigh	4.82	5.45	5.18	4.84	4.56	4.14	2.36	1.44
Salt Lake City	5.42	3.84	5.38	2.14	2.31	1.98	1.63	0.95
San Antonio	6.12	4.21	4.00	3.28	1.84	2.92	2.12	0.71
San Diego	10.53	5.90	5.98	3.14	0.99	1.20	0.55	0.33
San Francisco	4.28	3.29	1.85	1.20	0.71	0.84	0.60	0.34
Seattle	4.48	5.10	3.06	2.56	1.84	1.66	1.28	0.64
Tampa-St.	11.68	6.81	7.37	3.42	1.16	1.83	0.83	0.62
Washington	6.00	5.87	2.60	2.52	1.57	1.71	1.16	0.34

Appendix Table 2: Total Units Density (Units/Acre)

CBSA	1970	1980	1990	2000	2010	2020	2023
Atlanta	0.305	0.445	0.650	0.815	1.027	1.132	1.146
Boston	0.894	1.045	1.143	1.187	1.252	1.344	1.360
Charlotte	0.136	0.186	0.243	0.321	0.432	0.512	0.528
Chicago	0.736	0.978	0.970	1.059	1.139	1.180	1.184
Cleveland	0.579	0.657	0.665	0.703	0.726	0.733	0.732
Dallas	0.158	0.251	0.315	0.377	0.468	0.551	0.566
Denver	0.193	0.302	0.373	0.426	0.491	0.561	0.565
Detroit	0.540	0.633	0.654	0.702	0.727	0.731	0.736
Houston	0.151	0.261	0.304	0.351	0.447	0.537	0.553
Las Vegas	0.021	0.045	0.061	0.108	0.161	0.176	0.179
Los Angeles	0.979	1.239	1.295	1.412	1.448	1.524	1.536
Miami	0.386	0.519	0.536	0.620	0.888	0.980	0.987
New York	1.259	1.742	1.808	1.812	1.981	2.038	2.022
Orlando	0.072	0.123	0.204	0.266	0.364	0.421	0.433
Philadelphia	0.568	0.653	0.713	0.765	0.786	0.837	0.843
Phoenix	0.061	0.104	0.161	0.212	0.275	0.305	0.311
Raleigh	0.129	0.205	0.322	0.470	0.671	0.835	0.870
Salt Lake City	0.267	0.396	0.496	0.602	0.690	0.814	0.838
San Antonio	0.216	0.307	0.392	0.452	0.578	0.697	0.693
San Diego	0.174	0.285	0.350	0.383	0.422	0.462	0.467
San Francisco	0.670	0.865	0.931	0.994	1.047	1.103	1.114
Seattle	0.178	0.229	0.277	0.325	0.384	0.432	0.440
Tampa	0.458	0.735	0.951	1.046	1.172	1.263	1.282
Washington	0.477	0.616	0.749	0.853	0.991	1.106	1.099

Appendix Table 3: Decadal Percentage Change in Aggregate Total Units Density by Miles from City Center

CBSA	Miles from Center	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020
Atlanta	0-5	-0.022	-0.004	0.001	0.143	0.134
	5-10	0.240	0.139	0.101	0.141	0.110
	10 Plus	0.912	0.781	0.352	0.303	0.098
Boston	0-5	0.083	0.043	0.004	0.087	0.137
	5-10	0.091	0.063	0.032	0.028	0.062
	10 Plus	0.209	0.132	0.074	0.057	0.069
Charlotte	0-5	0.069	0.053	0.037	0.137	0.254
	5-10	0.535	0.450	0.351	0.338	0.157
	10 Plus	0.358	0.428	0.386	0.396	0.183
Chicago	0-5	-0.062	-0.034	0.104	-0.023	0.129
	5-10	0.003	-0.064	0.005	-0.029	0.032
	10 Plus	0.357	0.054	0.134	0.093	0.026
Cleveland	0-5	-0.086	-0.097	-0.015	-0.107	-0.018
	5-10	0.029	0.011	-0.001	-0.026	-0.026
	10 Plus	0.329	0.086	0.141	0.097	0.041
Dallas	0-5	0.020	0.011	-0.010	0.062	0.155
	5-10	0.407	0.114	-0.010	0.010	0.157
	10 Plus	0.711	0.438	0.275	0.309	0.196
Denver	0-5	0.036	0.011	0.020	0.082	0.195
	5-10	0.793	0.148	0.071	0.008	0.112
	10 Plus	2.216	0.694	0.369	0.326	0.152
Detroit	0-5	-0.185	-0.216	-0.081	-0.120	-0.092
	5-10	-0.015	-0.058	-0.033	-0.065	-0.064
	10 Plus	0.343	0.124	0.142	0.075	0.035
Houston	0-5	-0.034	-0.119	-0.001	0.151	0.176
	5-10	0.393	-0.010	0.015	0.068	0.086
	10 Plus	1.286	0.363	0.222	0.341	0.226
Las Vegas	0-5	0.833	0.238	0.100	0.034	-0.010
	5-10	2.421	1.370	1.174	0.532	0.071
	10 Plus	0.108	2.283	2.031	1.028	0.195

Appendix Table 3 Continued:

CBSA	Miles from Center	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020
Los Angeles	0-5	0.061	-0.066	-0.001	0.120	0.068
	5-10	0.062	0.030	0.045	-0.001	0.063
	10 Plus	0.334	0.078	0.109	0.030	0.052
Miami	0-5	0.181	-0.014	0.030	0.146	0.162
	5-10	0.202	-0.012	0.091	0.045	0.041
	10 Plus	0.511	0.108	0.186	0.447	0.103
New York	0-5	0.825	-0.029	-0.036	0.084	0.153
	5-10	0.253	-0.064	0.112	-0.019	0.099
	10 Plus	0.154	0.070	0.064	0.036	0.033
Orlando	0-5	0.286	0.119	0.060	0.146	0.084
	5-10	0.973	0.656	0.216	0.144	0.045
	10 Plus	0.991	0.922	0.432	0.525	0.204
Philadelphia	0-5	-0.082	-0.103	0.133	-0.156	0.211
	5-10	0.048	0.001	0.045	-0.049	0.044
	10 Plus	0.303	0.188	0.133	0.075	0.062
Phoenix	0-5	0.120	0.010	0.029	0.024	0.146
	5-10	0.922	0.234	0.108	0.125	0.066
	10 Plus	1.667	1.087	0.489	0.403	0.124
Raleigh	0-5	0.357	0.117	0.090	0.119	0.198
	5-10	1.742	0.793	0.473	0.389	0.144
	10 Plus	0.497	0.672	1.067	0.762	0.393
Salt Lake City	0-5	0.115	-0.057	0.135	-0.065	0.207
	5-10	0.538	0.210	0.138	0.036	0.090
	10 Plus	1.407	0.513	0.385	0.306	0.236
San Antonio	0-5	-0.022	-0.018	-0.011	0.000	0.062
	5-10	0.416	0.228	0.056	0.181	0.150
	10 Plus	1.710	0.964	0.392	0.519	0.311
San Diego	0-5	0.124	0.125	0.057	0.037	0.045
	5-10	0.185	0.232	0.030	-0.110	0.141
	10 Plus	1.198	0.445	0.149	0.147	0.104
San Francisco	0-5	0.005	-0.092	0.122	0.033	0.173
	5-10	0.195	-0.142	0.040	0.039	0.045
	10 Plus	0.296	0.162	0.087	0.049	0.056

Appendix Table 3 Continued:

CBSA	Miles from Center	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020
Seattle	0-5	0.070	0.063	0.061	0.163	0.249
	5-10	0.258	0.125	0.091	0.087	0.096
	10 Plus	0.423	0.303	0.232	0.191	0.112
Tampa	0-5	0.167	0.016	-0.034	-0.025	0.039
	5-10	0.664	0.402	0.048	0.001	0.044
	10 Plus	0.736	0.362	0.135	0.165	0.088
Washington	0-5	-0.009	-0.053	0.046	0.133	0.170
	5-10	0.151	0.063	0.035	0.031	0.084
	10 Plus	0.714	0.520	0.263	0.245	0.115

Appendix Table 4: CBSA-Level Distribution of Price-to-Income Ratios

CBSA	Year	10th	25th	50th	75th	90th
Atlanta	1970	1.05	1.29	1.52	2.11	2.81
	1980	1.09	1.43	2.34	3.36	4.58
	1990	1.34	1.70	2.45	3.43	5.43
	2000	1.51	1.88	2.65	4.35	7.40
	2010	2.22	2.72	3.61	5.18	7.71
	2020	1.58	2.22	3.25	5.34	8.03
	2023	2.23	2.80	3.89	5.85	7.91
Charlotte	1970	0.92	1.18	1.18	1.71	2.36
	1980	1.30	1.62	2.30	2.70	3.79
	1990	1.42	1.67	2.26	2.78	3.51
	2000	1.48	1.78	2.45	3.18	4.82
	2010	1.71	2.20	2.85	4.04	6.36
	2020	1.63	2.04	2.90	4.61	5.95
	2023	2.05	2.65	3.47	5.46	7.33
Dallas	1970	0.83	0.83	1.30	1.77	2.83
	1980	0.98	1.34	2.03	3.11	4.68
	1990	1.18	1.53	2.09	2.91	4.47
	2000	0.86	1.19	1.78	2.58	4.39
	2010	1.20	1.58	2.21	3.29	5.52
	2020	1.24	1.62	2.44	4.20	6.56
	2023	1.73	2.27	3.14	4.79	6.98
Houston	1970	0.87	1.12	1.37	1.87	2.24
	1980	1.24	1.56	2.12	3.10	4.10
	1990	1.08	1.35	1.75	2.40	3.38
	2000	0.96	1.27	1.75	2.39	3.49
	2010	1.29	1.57	2.05	3.06	4.35
	2020	1.25	1.67	2.39	3.63	5.82
	2023	1.53	2.10	2.91	4.03	5.97
Las Vegas	1970	1.52	1.76	2.11	2.81	2.81
	1980	2.62	2.79	3.62	4.05	5.00
	1990	1.94	2.26	2.81	3.51	4.68
	2000	2.15	2.31	2.92	3.57	4.96
	2010	2.60	3.10	4.44	5.66	7.25
	2020	2.93	3.35	4.34	6.01	7.86
	2023	3.71	4.15	4.98	6.81	8.21
Miami	1970	1.37	1.37	1.87	2.25	4.25
	1980	1.93	2.47	3.23	4.42	6.17
	1990	1.77	2.19	2.83	4.06	6.53
	2000	1.76	2.07	2.87	4.04	7.21
	2010	3.14	3.92	5.06	6.89	9.65
	2020	2.61	3.35	4.49	6.25	8.52
	2023	3.31	4.04	5.09	6.99	9.48

Appendix Table 4 Continued:

CBSA	Year	10th	25th	50th	75th	90th
Orlando	1970	1.03	1.32	1.62	1.91	2.65
	1980	1.74	2.29	2.74	3.51	4.62
	1990	1.86	2.19	2.65	3.07	4.17
	2000	1.76	2.06	2.57	3.10	4.07
	2010	2.48	3.29	4.06	5.29	6.76
	2020	2.05	2.79	3.74	4.71	6.33
	2023	2.69	3.31	4.22	4.87	6.89
Phoenix	1970	0.87	1.36	1.61	2.23	2.97
	1980	1.40	2.28	3.02	3.76	5.03
	1990	1.55	2.01	2.49	3.16	4.01
	2000	1.60	1.94	2.43	3.32	4.57
	2010	2.45	3.15	4.00	5.39	7.87
	2020	2.25	2.73	3.68	5.13	7.25
	2023	2.96	3.36	4.37	6.02	7.77
Raleigh	1970	1.15	1.15	1.66	2.30	3.07
	1980	1.63	1.99	2.64	3.69	4.23
	1990	1.79	2.19	2.72	3.51	4.24
	2000	1.82	2.29	3.35	4.18	5.81
	2010	2.35	2.67	4.05	5.67	7.93
	2020	2.06	2.75	4.27	5.30	7.02
	2023	2.69	3.60	4.72	6.21	8.03
San Antonio	1970	0.74	1.04	1.34	1.93	2.67
	1980	1.09	1.26	1.70	2.84	4.64
	1990	1.23	1.46	1.81	2.81	4.21
	2000	1.01	1.17	1.49	2.50	3.54
	2010	1.39	1.57	1.92	3.02	5.19
	2020	1.37	1.63	2.25	3.79	6.30
	2023	1.67	1.94	2.82	4.49	7.01
Tampa	1970	1.10	1.10	1.42	2.05	2.37
	1980	1.55	1.96	2.54	3.54	4.65
	1990	1.57	1.98	2.51	3.36	4.55
	2000	1.56	1.84	2.23	3.07	4.44
	2010	2.64	3.17	3.77	4.94	7.40
	2020	2.07	2.74	3.58	4.73	6.85
	2023	2.76	3.20	4.15	5.44	8.20
Boston	1970	1.16	1.37	1.90	1.90	2.54
	1980	1.41	1.98	2.62	3.33	4.44
	1990	3.08	3.67	4.23	5.17	7.43
	2000	2.22	2.87	3.70	5.06	7.59
	2010	3.80	4.58	5.34	6.84	9.08
	2020	3.02	3.85	4.97	6.88	9.06
	2023	3.50	4.28	5.31	7.18	9.31

Appendix Table 4 Continued:

CBSA	Year	10th	25th	50th	75th	90th
Los Angeles	1970	1.35	1.56	1.87	2.49	3.53
	1980	2.67	3.33	4.26	5.78	7.83
	1990	3.28	4.21	5.46	7.55	10.79
	2000	2.90	3.31	4.03	5.83	8.84
	2010	5.39	6.27	7.64	10.07	13.50
	2020	5.04	5.82	7.32	9.76	14.24
	2023	5.61	6.36	7.83	10.48	15.37
New York	1970	1.28	1.77	1.77	2.35	3.34
	1980	1.48	2.08	2.74	3.51	4.83
	1990	2.86	3.78	4.62	5.75	7.76
	2000	2.49	3.10	3.80	5.01	7.14
	2010	4.40	5.48	6.78	8.75	10.80
	2020	3.22	4.23	5.79	8.07	11.08
	2023	3.43	4.46	5.96	8.08	10.66
San Diego	1970	1.54	1.78	2.14	2.85	2.85
	1980	3.59	3.94	4.73	6.22	7.85
	1990	3.29	3.96	4.91	6.62	9.03
	2000	2.95	3.49	4.31	6.10	8.38
	2010	5.16	6.00	7.20	9.69	13.65
	2020	4.72	5.34	6.72	8.66	12.14
	2023	5.31	5.92	7.19	9.11	13.38
San Francisco	1970	1.48	1.77	2.36	2.36	3.35
	1980	2.49	3.58	4.65	6.47	8.58
	1990	3.10	4.39	6.14	8.36	11.13
	2000	2.51	3.62	5.44	7.96	10.90
	2010	4.85	5.92	8.12	10.81	12.58
	2020	4.32	5.42	7.72	10.44	14.10
	2023	4.50	5.92	8.11	11.01	13.97
Seattle	1970	1.18	1.39	1.60	1.92	2.56
	1980	2.25	2.84	3.33	3.78	4.77
	1990	2.09	2.60	3.49	4.45	5.63
	2000	2.55	3.10	3.88	5.16	6.78
	2010	3.58	4.31	5.43	7.01	8.90
	2020	3.11	3.82	5.27	7.41	9.32
	2023	3.60	4.32	5.70	7.76	9.76
Washington	1970	1.15	1.59	2.12	2.12	3.00
	1980	1.96	2.51	2.98	3.96	5.39
	1990	1.87	2.41	3.42	4.73	6.71
	2000	1.75	2.10	2.76	3.88	5.60
	2010	3.00	3.75	4.78	6.41	8.39
	2020	2.41	3.02	4.22	5.88	7.79
	2023	2.62	3.26	4.56	6.12	7.92

Appendix Table 4 Continued:

CBSA	Year	10th	25th	50th	75th	90th
Denver	1970	0.95	1.16	1.59	1.90	2.54
	1980	2.39	2.91	3.37	4.13	5.47
	1990	1.82	2.11	2.63	3.25	4.11
	2000	2.45	2.85	3.51	4.58	5.64
	2010	2.90	3.24	4.32	5.69	7.23
	2020	3.34	3.96	5.10	6.47	7.62
	2023	3.77	4.42	5.55	6.88	8.29
Salt Lake City	1970	1.11	1.36	1.60	2.22	2.96
	1980	2.22	2.53	3.44	4.21	4.98
	1990	1.60	1.73	2.43	3.15	4.17
	2000	2.44	2.66	3.55	4.45	6.02
	2010	2.80	3.32	4.43	5.90	7.55
	2020	2.86	3.41	4.57	5.90	7.48
	2023	3.57	4.30	5.24	6.90	8.29
Chicago	1970	1.12	1.32	1.52	2.44	2.44
	1980	1.25	1.63	2.50	3.54	4.89
	1990	1.31	1.72	2.52	3.86	6.01
	2000	1.57	2.04	3.01	4.40	7.37
	2010	2.36	3.16	4.44	6.23	8.54
	2020	1.55	2.23	3.25	4.93	7.32
	2023	1.71	2.41	3.35	4.87	7.13
Cleveland	1970	0.99	1.21	1.66	1.99	2.65
	1980	0.85	1.32	2.59	3.40	4.10
	1990	0.81	1.22	2.15	2.83	3.85
	2000	1.26	1.65	2.51	3.36	4.51
	2010	1.51	1.89	2.76	3.80	5.17
	2020	0.89	1.26	2.15	3.30	4.91
	2023	0.85	1.39	2.41	3.65	5.12
Detroit	1970	0.90	1.10	1.51	1.81	2.41
	1980	0.69	0.95	1.74	2.60	3.50
	1990	0.49	0.74	1.56	2.54	3.57
	2000	0.73	1.29	2.25	3.29	4.63
	2010	1.20	1.66	2.50	3.51	4.90
	2020	0.62	0.98	2.02	3.33	5.03
	2023	0.82	1.19	2.48	3.75	5.31
Philadelphia	1970	0.75	0.97	1.40	1.93	2.58
	1980	0.82	1.55	2.28	3.17	3.87
	1990	0.86	1.84	2.71	3.86	5.00
	2000	0.83	1.52	2.32	3.25	4.24
	2010	1.37	2.45	3.67	5.04	6.44
	2020	1.22	2.03	3.00	4.34	5.86
	2023	1.40	2.25	3.19	4.49	5.95

Notes: In each decade, the price-to-income ratio is constructed at the tract level by dividing the tract-level real median house price by the relevant CBSA-wide mean real income.

Appendix Table 5: Share of Tracts in P:MPPC Bins

CBSA	P:MPPC Bin	1970	1980	1990	2000	2010	2020	2023
Atlanta	P:MPPC < 0.8	0.835	0.818	0.727	0.553	0.539	0.555	0.416
	0.8 < P:MPPC < 1.2	0.097	0.140	0.135	0.193	0.233	0.202	0.267
	P:MPPC > 1.2	0.068	0.042	0.139	0.254	0.229	0.244	0.317
Charlotte	P:MPPC < 0.8	0.928	0.869	0.773	0.490	0.649	0.649	0.516
	0.8 < P:MPPC < 1.2	0.052	0.103	0.149	0.333	0.182	0.205	0.229
	P:MPPC > 1.2	0.020	0.028	0.078	0.176	0.169	0.146	0.255
Dallas	P:MPPC < 0.8	0.876	0.838	0.791	0.754	0.776	0.684	0.527
	0.8 < P:MPPC < 1.2	0.099	0.092	0.115	0.131	0.121	0.146	0.230
	P:MPPC > 1.2	0.025	0.070	0.094	0.114	0.103	0.170	0.243
Houston	P:MPPC < 0.8	0.908	0.813	0.892	0.824	0.796	0.720	0.643
	0.8 < P:MPPC < 1.2	0.082	0.147	0.071	0.101	0.131	0.163	0.215
	P:MPPC > 1.2	0.011	0.039	0.038	0.076	0.073	0.117	0.142
Las Vegas	P:MPPC < 0.8	0.938	0.815	0.800	0.783	0.743	0.757	0.671
	0.8 < P:MPPC < 1.2	0.047	0.123	0.143	0.174	0.214	0.186	0.243
	P:MPPC > 1.2	0.016	0.062	0.057	0.043	0.043	0.057	0.086
Miami	P:MPPC < 0.8	0.899	0.657	0.659	0.531	0.288	0.393	0.183
	0.8 < P:MPPC < 1.2	0.081	0.198	0.161	0.258	0.361	0.300	0.403
	P:MPPC > 1.2	0.020	0.145	0.180	0.210	0.351	0.307	0.413
Orlando	P:MPPC < 0.8	0.958	0.847	0.825	0.658	0.358	0.500	0.316
	0.8 < P:MPPC < 1.2	0.042	0.153	0.117	0.250	0.483	0.342	0.470
	P:MPPC > 1.2	.	.	0.058	0.092	0.158	0.158	0.214
Phoenix	P:MPPC < 0.8	0.955	0.839	0.825	0.683	0.535	0.588	0.346
	0.8 < P:MPPC < 1.2	0.036	0.106	0.122	0.229	0.287	0.268	0.355
	P:MPPC > 1.2	0.009	0.055	0.052	0.088	0.178	0.145	0.298
Raleigh	P:MPPC < 0.8	0.815	0.720	0.473	0.200	0.345	0.273	0.109
	0.8 < P:MPPC < 1.2	0.148	0.240	0.418	0.273	0.200	0.255	0.255
	P:MPPC > 1.2	0.037	0.040	0.109	0.527	0.455	0.473	0.636
San Antonio	P:MPPC < 0.8	0.915	0.867	0.895	0.883	0.883	0.846	0.747
	0.8 < P:MPPC < 1.2	0.079	0.114	0.064	0.064	0.070	0.083	0.141
	P:MPPC > 1.2	0.006	0.018	0.041	0.053	0.047	0.071	0.112
Tampa	P:MPPC < 0.8	0.964	0.927	0.828	0.765	0.653	0.591	0.407
	0.8 < P:MPPC < 1.2	0.036	0.068	0.115	0.146	0.227	0.262	0.367
	P:MPPC > 1.2	.	0.005	0.057	0.088	0.120	0.147	0.226

Appendix Table 5 Continued:

CBSA	P:MPPC Bin	1970	1980	1990	2000	2010	2020	2023
Boston	P:MPPC < 0.8	0.929	0.844	0.138	0.219	0.069	0.127	0.042
	0.8 < P:MPPC < 1.2	0.043	0.119	0.562	0.405	0.432	0.348	0.251
	P:MPPC > 1.2	0.027	0.038	0.300	0.375	0.499	0.526	0.707
Los Angeles	P:MPPC < 0.8	0.856	0.383	0.085	0.149	0.015	0.019	0.011
	0.8 < P:MPPC < 1.2	0.096	0.361	0.292	0.451	0.096	0.232	0.057
	P:MPPC > 1.2	0.048	0.256	0.624	0.400	0.889	0.749	0.932
New York	P:MPPC < 0.8	0.856	0.839	0.210	0.387	0.088	0.235	0.158
	0.8 < P:MPPC < 1.2	0.105	0.107	0.458	0.397	0.321	0.320	0.315
	P:MPPC > 1.2	0.038	0.054	0.332	0.215	0.592	0.445	0.527
San Diego	P:MPPC < 0.8	0.932	0.399	0.153	0.152	0.016	0.043	0.013
	0.8 < P:MPPC < 1.2	0.054	0.393	0.433	0.421	0.136	0.287	0.072
	P:MPPC > 1.2	0.014	0.208	0.414	0.427	0.847	0.670	0.914
San Francisco	P:MPPC < 0.8	0.815	0.382	0.120	0.116	0.007	0.018	0.003
	0.8 < P:MPPC < 1.2	0.135	0.331	0.206	0.172	0.113	0.111	0.058
	P:MPPC > 1.2	0.050	0.287	0.674	0.712	0.880	0.871	0.939
Seattle	P:MPPC < 0.8	0.975	0.786	0.472	0.152	0.086	0.117	0.010
	0.8 < P:MPPC < 1.2	0.019	0.184	0.370	0.415	0.354	0.316	0.204
	P:MPPC > 1.2	0.005	0.030	0.157	0.434	0.560	0.567	0.786
Washington	P:MPPC < 0.8	0.470	0.389	0.193	0.208	0.011	0.090	0.058
	0.8 < P:MPPC < 1.2	0.487	0.379	0.285	0.386	0.224	0.301	0.286
	P:MPPC > 1.2	0.043	0.232	0.522	0.405	0.765	0.610	0.657
Denver	P:MPPC < 0.8	0.752	0.578	0.767	0.210	0.353	0.093	0.022
	0.8 < P:MPPC < 1.2	0.236	0.314	0.185	0.476	0.387	0.363	0.230
	P:MPPC > 1.2	0.012	0.109	0.048	0.315	0.260	0.544	0.748
Salt Lake City	P:MPPC < 0.8	0.852	0.667	0.822	0.270	0.300	0.236	0.034
	0.8 < P:MPPC < 1.2	0.136	0.262	0.111	0.404	0.344	0.348	0.348
	P:MPPC > 1.2	0.011	0.071	0.067	0.326	0.356	0.416	0.618
Chicago	P:MPPC < 0.8	0.914	0.803	0.714	0.564	0.528	0.734	0.722
	0.8 < P:MPPC < 1.2	0.064	0.136	0.162	0.233	0.287	0.161	0.160
	P:MPPC > 1.2	0.022	0.061	0.124	0.203	0.184	0.104	0.118
Cleveland	P:MPPC < 0.8	0.948	0.847	0.891	0.768	0.878	0.900	0.874
	0.8 < P:MPPC < 1.2	0.038	0.131	0.082	0.164	0.101	0.090	0.110
	P:MPPC > 1.2	0.014	0.022	0.027	0.068	0.021	0.010	0.016

Appendix Table 5 Continued:

CBSA	P:MPPC Bin	1970	1980	1990	2000	2010	2020	2023
Detroit	P:MPPC < 0.8	0.934	0.903	0.899	0.752	0.895	0.912	0.884
	0.8 < P:MPPC < 1.2	0.049	0.072	0.065	0.165	0.079	0.067	0.087
	P:MPPC > 1.2	0.018	0.026	0.036	0.084	0.026	0.021	0.028
Philadelphia	P:MPPC < 0.8	0.953	0.834	0.598	0.715	0.599	0.730	0.670
	0.8 < P:MPPC < 1.2	0.035	0.137	0.274	0.209	0.273	0.205	0.233
	P:MPPC > 1.2	0.011	0.029	0.128	0.076	0.128	0.065	0.098

Note: P:MPPC is calculated for each tract in each year by taking the real median home value (P), and dividing it by the CBSA-level value of MPPC. We compute the share of tracts in a CBSA in the designated bins accordingly.

Appendix Table 6A: Regression Tables of Delta Log All Unit Density on Initial Period Log Price for 6 CBSAs Outside 10 Miles from CBSA Center, 3 Specifications

Coefficient	CBSA	(1) Naive OLS					(2) Log Price IV					(3) Distance and Octant IV				
		1970	1980	1990	2000	2010	1970	1980	1990	2000	2010	1970	1980	1990	2000	2010
Log Price	Atlanta	0.207	0.338	0.202	0.067	0.022	0.333	0.178	0.166	0.043	0.031	0.295	0.345	0.170	0.017	0.022
Log Price SE	Atlanta	(0.095)	(0.083)	(0.063)	(0.040)	(0.019)	(0.171)	(0.181)	(0.075)	(0.039)	(0.021)	(0.163)	(0.117)	(0.086)	(0.038)	(0.020)
Density	Atlanta	-0.137	-0.151	-0.173	-0.193	-0.026	-0.141	-0.148	-0.171	-0.192	-0.027	-0.140	-0.151	-0.172	-0.191	-0.026
Density SE	Atlanta	(0.031)	(0.023)	(0.021)	(0.018)	(0.011)	(0.032)	(0.024)	(0.027)	(0.028)	(0.010)	(0.031)	(0.023)	(0.027)	(0.028)	(0.009)
R2/Wald F	Atlanta	0.224	0.431	0.481	0.597	0.079	113.248	6.433	1228.889	316.454	205.674	16.013	19.586	29.291	29.573	40.829
Log Price	Dallas	0.638	0.391	0.251	0.166	0.084	0.719	0.444	0.213	0.137	0.062	0.964	0.655	0.365	0.206	0.198
Log Price SE	Dallas	(0.050)	(0.041)	(0.021)	(0.028)	(0.019)	(0.071)	(0.058)	(0.030)	(0.048)	(0.023)	(0.110)	(0.126)	(0.057)	(0.060)	(0.058)
Density	Dallas	-0.156	-0.098	-0.066	-0.094	-0.044	-0.151	-0.096	-0.068	-0.095	-0.045	-0.137	-0.090	-0.059	-0.093	-0.044
Density SE	Dallas	(0.014)	(0.011)	(0.007)	(0.010)	(0.008)	(0.014)	(0.010)	(0.006)	(0.012)	(0.007)	(0.015)	(0.011)	(0.006)	(0.012)	(0.007)
R2/Wald F	Dallas	0.525	0.356	0.443	0.296	0.159	533.708	1675.992	2180.918	466.027	1627.643	15.024	10.773	13.889	12.073	9.079
Log Price	Miami	0.208	0.138	0.071	0.021	0.008	0.239	0.191	0.074	0.079	0.001	0.638	-0.110	-0.045	0.101	0.033
Log Price SE	Miami	(0.061)	(0.031)	(0.020)	(0.026)	(0.012)	(0.076)	(0.042)	(0.029)	(0.059)	(0.015)	(0.303)	(0.167)	(0.075)	(0.101)	(0.044)
Density	Miami	-0.316	-0.152	-0.059	-0.071	-0.011	-0.315	-0.150	-0.059	-0.069	-0.011	-0.295	-0.162	-0.061	-0.068	-0.010
Density SE	Miami	(0.017)	(0.013)	(0.011)	(0.013)	(0.008)	(0.037)	(0.027)	(0.016)	(0.024)	(0.011)	(0.038)	(0.031)	(0.017)	(0.023)	(0.010)
R2/Wald F	Miami	0.569	0.343	0.128	0.099	0.009	512.362	177.036	1064.188	402.948	1242.684	4.534	4.790	7.561	7.156	6.421
Log Price	Phoenix	0.442	0.433	0.240	-0.037	0.108	0.646	0.372	0.252	-0.207	0.091	0.729	0.623	0.250	-0.253	0.053
Log Price SE	Phoenix	(0.198)	(0.112)	(0.072)	(0.085)	(0.025)	(0.248)	(0.134)	(0.087)	(0.145)	(0.046)	(0.281)	(0.141)	(0.105)	(0.199)	(0.054)
Density	Phoenix	-0.198	-0.038	-0.058	-0.120	-0.033	-0.194	-0.040	-0.058	-0.128	-0.034	-0.192	-0.030	-0.058	-0.131	-0.035
Density SE	Phoenix	(0.040)	(0.022)	(0.015)	(0.021)	(0.008)	(0.054)	(0.020)	(0.016)	(0.042)	(0.013)	(0.057)	(0.018)	(0.018)	(0.044)	(0.014)
R2/Wald F	Phoenix	0.314	0.235	0.352	0.331	0.429	60.770	213.140	264.694	95.563	608.168	6432.976	1183.849	278.109	692.420	1.847
Log Price	Los Angeles	0.181	0.033	0.001	-0.026	-0.026	0.149	0.022	0.009	-0.029	-0.031	0.282	0.081	0.010	0.035	-0.003
Log Price SE	Los Angeles	(0.022)	(0.014)	(0.006)	(0.011)	(0.007)	(0.033)	(0.020)	(0.009)	(0.014)	(0.010)	(0.042)	(0.032)	(0.017)	(0.024)	(0.010)
Density	Los Angeles	-0.143	-0.081	-0.031	-0.045	-0.019	-0.145	-0.081	-0.030	-0.045	-0.019	-0.137	-0.081	-0.030	-0.044	-0.019
Density SE	Los Angeles	(0.007)	(0.005)	(0.003)	(0.004)	(0.003)	(0.017)	(0.014)	(0.007)	(0.013)	(0.007)	(0.016)	(0.013)	(0.006)	(0.013)	(0.007)
R2/Wald F	Los Angeles	0.315	0.158	0.087	0.094	0.037	1236.038	423.129	789.576	2275.965	1082.763	61.914	78.194	48.816	71.518	59.599
Log Price	Detroit	0.206	0.097	0.051	0.051	0.053	0.201	0.105	0.062	0.090	0.040	0.487	0.216	0.141	0.059	0.068
Log Price SE	Detroit	(0.034)	(0.020)	(0.022)	(0.014)	(0.007)	(0.044)	(0.025)	(0.027)	(0.035)	(0.011)	(0.087)	(0.039)	(0.043)	(0.041)	(0.016)
Density	Detroit	-0.147	-0.061	-0.100	-0.057	-0.011	-0.148	-0.060	-0.098	-0.051	-0.014	-0.117	-0.045	-0.087	-0.055	-0.008
Density SE	Detroit	(0.010)	(0.008)	(0.008)	(0.005)	(0.004)	(0.014)	(0.007)	(0.014)	(0.006)	(0.006)	(0.011)	(0.007)	(0.011)	(0.006)	(0.003)
R2/Wald F	Detroit	0.385	0.170	0.263	0.255	0.157	587.756	5669.334	2540.396	924.120	1752.011	27.491	24.799	25.738	22.694	22.645

Appendix Table 6B: Regression Tables of Delta Log All Unit Density on Initial Period Log Price for 6 CBSAs Within 10 Miles from CBSA Center, 3 Specifications

Coefficient	CBSA	(1) Naive OLS					(2) Log Price IV					(3) Distance and Octant IV				
		1970	1980	1990	2000	2010	1970	1980	1990	2000	2010	1970	1980	1990	2000	2010
Log Price	Atlanta	0.089	0.160	0.139	0.092	0.121	0.094	0.164	0.109	0.074	0.143	0.090	0.198	0.121	0.231	0.159
Log Price SE	Atlanta	(0.035)	(0.032)	(0.032)	(0.043)	(0.024)	(0.067)	(0.038)	(0.043)	(0.048)	(0.031)	(0.042)	(0.047)	(0.036)	(0.068)	(0.033)
Density	Atlanta	-0.210	-0.026	-0.136	-0.112	0.012	-0.209	-0.026	-0.134	-0.110	0.005	-0.210	-0.022	-0.135	-0.129	0.001
Density SE	Atlanta	(0.025)	(0.029)	(0.031)	(0.036)	(0.025)	(0.045)	(0.041)	(0.077)	(0.055)	(0.029)	(0.040)	(0.041)	(0.078)	(0.058)	(0.027)
R2/Wald F	Atlanta	0.388	0.144	0.184	0.074	0.171	374.502	612.622	230.174	259.428	382.068	39.141	36.271	29.587	20.528	17.825
Log Price	Dallas	0.182	0.053	0.108	0.027	0.011	0.252	0.096	0.074	-0.012	0.012	0.187	0.042	0.095	0.032	0.026
Log Price SE	Dallas	(0.046)	(0.030)	(0.026)	(0.022)	(0.019)	(0.078)	(0.031)	(0.034)	(0.023)	(0.017)	(0.066)	(0.026)	(0.028)	(0.024)	(0.019)
Density	Dallas	-0.246	-0.053	-0.151	-0.128	-0.004	-0.242	-0.057	-0.148	-0.123	-0.004	-0.246	-0.053	-0.150	-0.129	-0.007
Density SE	Dallas	(0.036)	(0.025)	(0.025)	(0.023)	(0.023)	(0.070)	(0.032)	(0.043)	(0.044)	(0.032)	(0.070)	(0.032)	(0.043)	(0.046)	(0.035)
R2/Wald F	Dallas	0.258	0.036	0.205	0.140	0.002	775.409	1020.936	706.185	1254.275	1699.970	33.077	26.717	31.451	31.108	40.250
Log Price	Miami	0.195	0.092	0.048	0.052	-0.016	0.148	0.100	0.054	0.055	-0.052	0.135	0.071	0.021	0.131	0.008
Log Price SE	Miami	(0.043)	(0.045)	(0.017)	(0.039)	(0.024)	(0.041)	(0.045)	(0.021)	(0.044)	(0.025)	(0.061)	(0.054)	(0.026)	(0.070)	(0.035)
Density	Miami	-0.011	-0.189	0.008	-0.014	0.001	-0.015	-0.188	0.008	-0.014	-0.002	-0.015	-0.189	0.008	-0.009	0.003
Density SE	Miami	(0.023)	(0.028)	(0.017)	(0.030)	(0.025)	(0.023)	(0.081)	(0.023)	(0.027)	(0.028)	(0.022)	(0.081)	(0.023)	(0.026)	(0.029)
R2/Wald F	Miami	0.170	0.326	0.072	0.020	0.005	219.844	925.937	937.050	114.447	466.877	22.781	87.063	75.936	87.928	92.727
Log Price	Phoenix	0.370	0.077	0.040	0.065	0.025	0.356	0.173	0.051	0.111	0.028	0.450	0.249	0.108	0.005	0.054
Log Price SE	Phoenix	(0.057)	(0.054)	(0.024)	(0.043)	(0.021)	(0.076)	(0.078)	(0.024)	(0.097)	(0.022)	(0.080)	(0.080)	(0.030)	(0.053)	(0.031)
Density	Phoenix	-0.325	-0.057	-0.068	-0.119	0.022	-0.325	-0.059	-0.067	-0.118	0.022	-0.321	-0.061	-0.066	-0.120	0.024
Density SE	Phoenix	(0.030)	(0.033)	(0.016)	(0.030)	(0.018)	(0.048)	(0.051)	(0.045)	(0.069)	(0.033)	(0.048)	(0.053)	(0.045)	(0.072)	(0.032)
R2/Wald F	Phoenix	0.533	0.032	0.127	0.107	0.019	452.775	398.589	1154.424	422.068	799.112	18.907	11.715	10.088	9.731	11.836
Log Price	Los Angeles	0.075	0.014	0.004	0.000	-0.008	0.093	0.018	-0.008	0.031	-0.011	0.111	0.017	-0.009	0.035	0.005
Log Price SE	Los Angeles	(0.014)	(0.016)	(0.010)	(0.023)	(0.008)	(0.019)	(0.021)	(0.013)	(0.025)	(0.009)	(0.017)	(0.015)	(0.009)	(0.023)	(0.009)
Density	Los Angeles	-0.018	-0.005	-0.002	-0.097	-0.007	-0.016	-0.005	-0.003	-0.095	-0.008	-0.014	-0.005	-0.003	-0.094	-0.006
Density SE	Los Angeles	(0.010)	(0.012)	(0.007)	(0.012)	(0.005)	(0.015)	(0.019)	(0.008)	(0.032)	(0.006)	(0.016)	(0.019)	(0.008)	(0.031)	(0.007)
R2/Wald F	Los Angeles	0.051	0.002	0.000	0.107	0.004	533.422	856.636	158.387	1275.024	1596.436	104.425	187.629	89.202	132.332	140.606
Log Price	Detroit	0.126	0.208	0.154	0.185	0.145	0.167	0.263	0.156	0.214	0.188	0.190	0.235	0.161	0.251	0.240
Log Price SE	Detroit	(0.029)	(0.027)	(0.012)	(0.022)	(0.017)	(0.061)	(0.041)	(0.016)	(0.035)	(0.023)	(0.054)	(0.038)	(0.016)	(0.042)	(0.036)
Density	Detroit	-0.222	-0.105	0.006	-0.117	-0.032	-0.211	-0.088	0.006	-0.119	-0.029	-0.205	-0.097	0.006	-0.121	-0.025
Density SE	Detroit	(0.022)	(0.027)	(0.014)	(0.019)	(0.020)	(0.046)	(0.043)	(0.015)	(0.046)	(0.027)	(0.045)	(0.043)	(0.015)	(0.046)	(0.029)
R2/Wald F	Detroit	0.269	0.178	0.252	0.181	0.148	56.946	844.668	856.171	485.058	524.662	32.286	1122.746	37.223	28.736	20.649

Appendix Table 7: Percentage Changes in Housing Production, Price vs Density by Decade, 24 CBSAs

CBSA	Year	Total change in units	Low Density/Low Price	Low Density/Moderate-to-High Price	High Density/Low Price	High Density/Moderate-to-High Price
Atlanta	1970s	231,118	0.059	0.901	-0.004	0.044
	1980s	297,572	0.045	0.884	0.019	0.052
	1990s	258,881	0.046	0.860	0.001	0.093
	2000s	331,861	0.320	0.508	0.051	0.121
	2010s	164,869	0.204	0.395	0.053	0.347
Charlotte	1970s	82,315	0.338	0.644	-0.010	0.027
	1980s	90,483	0.077	0.841	0.000	0.083
	1990s	130,171	0.029	0.912	-0.003	0.062
	2000s	188,666	0.080	0.857	0.014	0.050
	2010s	135,852	0.085	0.686	0.034	0.195
Dallas	1970s	347,958	0.136	0.694	0.005	0.165
	1980s	389,433	0.126	0.674	0.020	0.180
	1990s	338,408	0.110	0.753	-0.002	0.139
	2000s	497,227	0.138	0.722	0.023	0.118
	2010s	444,406	0.136	0.570	0.041	0.252
Houston	1970s	501,757	0.161	0.626	0.028	0.185
	1980s	300,195	0.066	0.762	0.002	0.171
	1990s	266,766	0.097	0.734	0.001	0.168
	2000s	497,157	0.119	0.707	0.026	0.148
	2010s	450,950	0.148	0.602	0.056	0.194
Las Vegas	1970s	87,645	0.070	0.775	0.065	0.091
	1980s	104,140	0.030	0.683	0.036	0.251
	1990s	244,370	0.018	0.810	0.039	0.133
	2000s	277,571	-0.001	0.542	0.008	0.451
	2010s	80,348	0.000	0.502	0.016	0.482
Miami	1970s	595,427	0.238	0.444	0.083	0.236
	1980s	416,262	0.039	0.654	0.055	0.252
	1990s	299,419	0.051	0.596	0.099	0.253
	2000s	275,001	0.091	0.267	0.170	0.472
	2010s	179,585	0.064	0.121	0.262	0.552
Orlando	1970s	143,446	0.369	0.575	-0.002	0.058
	1980s	183,976	0.205	0.752	0.002	0.041
	1990s	159,473	0.078	0.791	0.031	0.100
	2000s	254,531	0.072	0.795	0.093	0.041
	2010s	146,772	0.073	0.734	0.065	0.129
Phoenix	1970s	286,947	0.178	0.627	0.046	0.149
	1980s	292,202	0.060	0.637	0.044	0.259
	1990s	300,577	0.014	0.817	0.011	0.159
	2000s	378,479	0.075	0.775	0.030	0.119
	2010s	177,490	0.027	0.696	0.063	0.214

Appendix Table 7 Continued:

CBSA	Year	Total change in units	Low Density/Low Price	Low Density/Moderate-to-High Price	High Density/Low Price	High Density/Moderate-to-High Price
Raleigh	1970s	42,775	0.143	0.839	0.010	0.008
	1980s	60,844	0.067	0.872	0.024	0.037
	1990s	81,941	0.035	0.963	-0.003	0.005
	2000s	112,276	0.270	0.705	0.008	0.017
	2010s	90,053	0.222	0.530	0.031	0.216
San Antonio	1970s	104,922	0.079	0.843	-0.002	0.081
	1980s	118,320	0.159	0.698	-0.006	0.149
	1990s	75,788	0.063	0.799	-0.025	0.163
	2000s	152,965	0.061	0.732	0.025	0.182
	2010s	143,790	0.086	0.612	0.039	0.263
Tampa	1970s	245,312	0.069	0.699	0.014	0.217
	1980s	184,074	0.019	0.701	0.009	0.271
	1990s	86,748	0.016	0.744	-0.026	0.266
	2000s	121,485	0.030	0.708	0.045	0.217
	2010s	81,557	0.107	0.534	0.073	0.286
Boston	1970s	152,718	0.064	0.597	0.032	0.307
	1980s	114,802	0.030	0.585	0.133	0.252
	1990s	75,407	0.150	0.564	0.030	0.256
	2000s	65,070	0.199	0.455	0.241	0.105
	2010s	118,236	0.077	0.264	0.224	0.435
Los Angeles	1970s	577,763	0.049	0.412	0.039	0.500
	1980s	453,678	0.082	0.359	0.166	0.394
	1990s	211,335	0.074	0.433	0.167	0.326
	2000s	188,100	0.145	0.413	0.186	0.256
	2010s	231,359	0.057	0.196	0.278	0.470
New York	1970s	451,598	0.070	0.484	0.058	0.389
	1980s	330,989	0.065	0.562	0.061	0.311
	1990s	432,481	0.063	0.272	0.256	0.409
	2000s	195,056	0.237	0.370	0.247	0.146
	2010s	419,158	0.042	0.095	0.303	0.561
San Diego	1970s	258,396	0.018	0.669	0.043	0.270
	1980s	207,288	0.054	0.638	0.139	0.170
	1990s	93,689	0.070	0.649	0.081	0.200
	2000s	103,943	0.108	0.604	0.068	0.220
	2010s	64,619	0.073	0.180	0.145	0.602
San Francisco	1970s	220,410	0.193	0.459	0.156	0.193
	1980s	146,540	0.127	0.407	0.194	0.271
	1990s	114,608	0.165	0.402	0.156	0.277
	2000s	80,411	0.252	0.444	0.221	0.083
	2010s	106,133	0.101	0.235	0.220	0.444
Seattle	1970s	199,102	0.075	0.749	0.041	0.134
	1980s	206,438	0.053	0.656	0.032	0.259
	1990s	197,972	0.223	0.455	0.095	0.227
	2000s	184,163	0.208	0.417	0.119	0.256
	2010s	184,081	0.132	0.244	0.139	0.484

Appendix Table 7 Continued:

CBSA	Year	Total change in units	Low Density/Low Price	Low Density/Moderate-to-High Price	High Density/Low Price	High Density/Moderate-to-High Price
Washington	1970s	251,831	0.151	0.629	0.066	0.154
	1980s	284,964	0.151	0.619	0.036	0.194
	1990s	221,132	0.244	0.513	0.061	0.182
	2000s	247,493	0.206	0.432	0.099	0.264
	2010s	228,625	0.083	0.305	0.238	0.374
Denver	1970s	191,374	0.105	0.745	0.034	0.116
	1980s	120,569	0.084	0.518	0.029	0.369
	1990s	99,918	0.037	0.674	0.056	0.234
	2000s	121,201	0.107	0.569	0.076	0.247
	2010s	128,889	0.076	0.337	0.116	0.472
Salt Lake City	1970s	74,747	0.102	0.707	0.058	0.133
	1980s	40,244	0.102	0.661	0.024	0.213
	1990s	53,487	0.100	0.605	0.063	0.232
	2000s	45,692	0.306	0.578	0.058	0.059
	2010s	63,373	0.101	0.472	0.199	0.228
Chicago	1970s	452,907	0.050	0.773	-0.009	0.186
	1980s	183,950	0.059	0.863	-0.161	0.239
	1990s	324,451	0.101	0.677	0.032	0.191
	2000s	262,746	0.142	0.678	-0.015	0.195
	2010s	147,127	0.109	0.276	0.064	0.552
Cleveland	1970s	100,412	0.078	0.783	-0.049	0.188
	1980s	40,206	-0.016	1.108	-0.271	0.179
	1990s	56,651	-0.005	0.982	-0.124	0.147
	2000s	43,233	0.083	1.145	-0.235	0.007
	2010s	28,666	0.018	0.844	-0.249	0.387
Detroit	1970s	258,898	0.039	0.828	-0.005	0.138
	1980s	115,810	0.016	1.001	-0.247	0.229
	1990s	145,227	0.003	1.001	-0.171	0.167
	2000s	75,078	0.021	1.161	-0.397	0.215
	2010s	36,451	0.052	1.121	-0.696	0.523
Philadelphia	1970s	281,105	0.124	0.654	0.054	0.167
	1980s	198,526	0.011	0.863	-0.046	0.172
	1990s	166,499	0.016	0.913	-0.010	0.081
	2000s	110,567	0.055	1.121	-0.183	0.007
	2010s	147,523	0.024	0.453	0.200	0.324

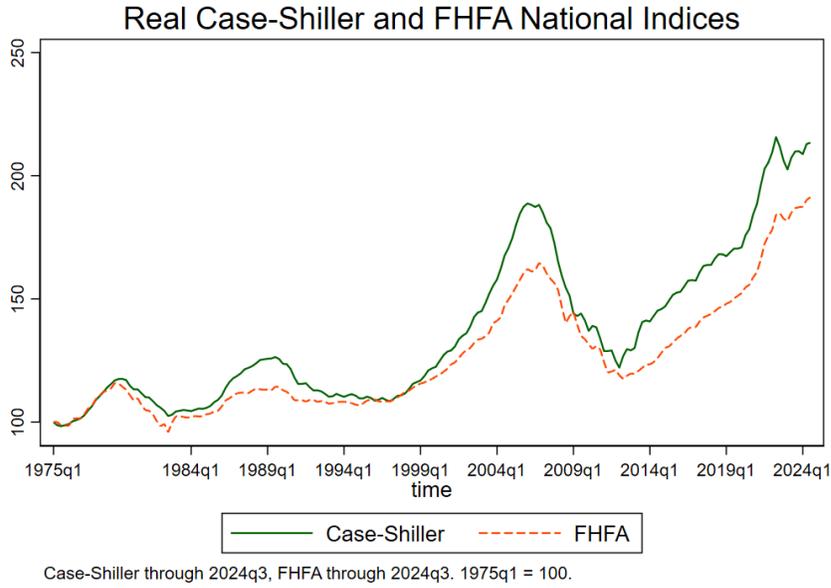
Appendix Table 8: 44 CBSA Satisfying Requirement for the Regression

44 CBSAs		
Albany	Houston	Riverside
Allentown	Indianapolis	Rochester
Atlanta	Kansas City	Sacramento
Baltimore	Los Angeles	St. Louis
Birmingham	Miami	San Diego
Boston	Milwaukee	San Francisco
Buffalo	Minneapolis	San Jose
Charlotte	New York	Scranton
Chicago	Oklahoma City	Seattle
Cincinnati	Orlando	Syracuse
Cleveland	Philadelphia	Tampa
Dallas	Phoenix	Virginia Beach
Dayton	Pittsburgh	Washington
Detroit	Portland	Worcester
Greensboro	Providence	

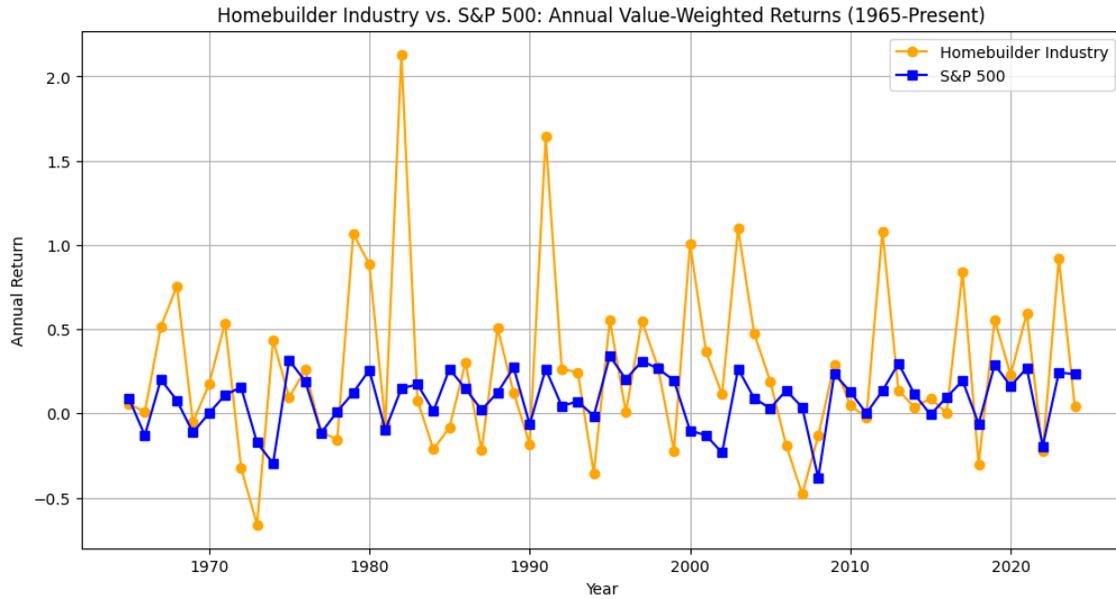
Note: Scranton, PA and Providence, RI are not included in the ‘outside’ of 10 miles sample.

II. Appendix Figures

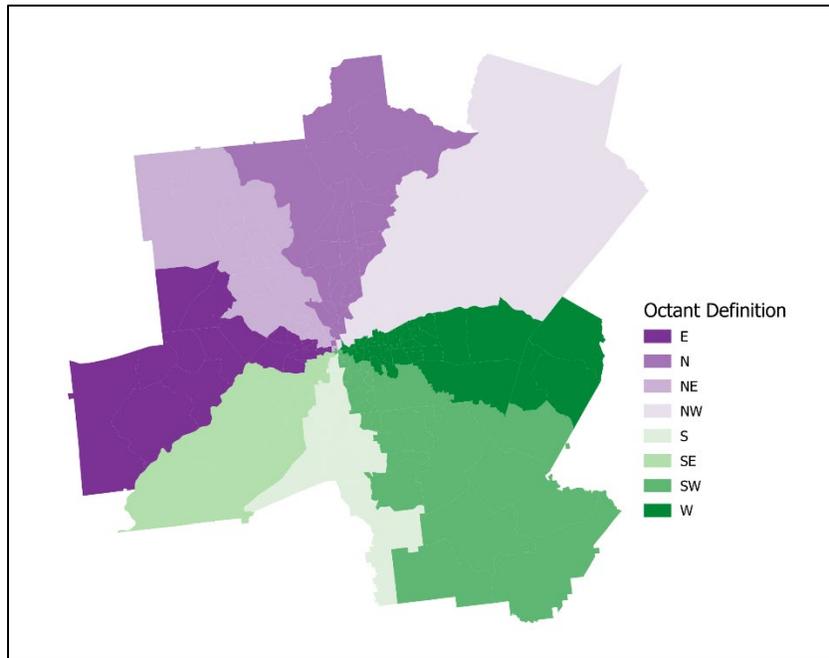
Appendix Figure 1: Real Case-Shiller and FHFA National Indices.



Appendix Figure 2: Annual Value-Weighted Returns, Homebuilders and the S&P500



Appendix Figure 3: Atlanta CBSA Octant Definition



Appendix Discussion 1: County-Level Year-Built Data for CBSA Aggregates in 1950-1960

In Figure 1, we aggregate to the CBSA level in 1950 and 1960 using county-level estimates of the stock by the year the homes were built in. For 1950, we use the stock of homes for each county (observed in 1970) that were built before 1950. We do the same for 1960. We do this for three reasons. First, most metropolitan areas were not close to having their current number of tracts by 1950 or 1960. Thus, when we aggregate to the CBSA level using tract data, we undercount the number of homes in 1950 and 1960, resulting in a potentially large overestimate in the units added from 1960-1970 especially. Secondly, many of the markets we are interested in, such as Tampa and Phoenix have no tract-level data in 1950. Finally, we have access to county data from 1970 onwards that has full coverage for the entire country, allowing us to consistently construct a market's housing stock. Thus, to match our 1970-onwards sample of counties, and to alleviate the other two shortcomings of aggregating tract data, we use the 'year-built' variable in the 1970 county-level census to identify the stock of homes built before 1950 and 1960 to construct county-level estimates for the entire country. From this, we aggregate to

the CBSA level, and obtain market-level housing stocks consistently measured over time. That said, there is a downside to this decision—namely, some homes built before 1950 or 1960 may have been removed from the housing stock before the 1970 census. If we believe that homes roughly depreciate at the same rate across the country, our method consistently undercounts the 1950 and 1960 stock. However, we believe that the added benefit of full coverage, and consistent spatial measurement of a market’s stock by using the county-level data is worth this cost. In addition, we conclude that this error is relatively small and can be signed. See our Reverse Technical Documentation Memo those details.