

The Long Shadow of Housing Discrimination: Evidence from Racial Covenants

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ONLINE APPENDIX

A. Data Appendix

A.1 Hennepin County Assessor Data

The baseline housing data come from 2019 Hennepin County GIS parcel files, which include 435,765 parcels, 418,953 of them residential. Each parcel is located by a geographical polygon. All parcels have an assessed market value for tax purposes. Detailed information on building characteristics, last sale date, and sale price is available for 315,414 parcels. For those with missing data, we use Zillow to supplement the information.¹ We deflate all prices to base year 2019 using the monthly historical consumer price index (CPI).

A.2 Hennepin County Historical Records

Table A.1: Historical County Records for a Random Sample of Houses

	Mean	Median	<i>N</i>
Δ First Sale Year – Build Year	0.13	0.0	2,982
Δ Resale Year – First Sale Year	11.9	9.0	805

Note: This table shows the mean and median differences between the first sale year and build year and between resale year and first sale year for a sample of houses built between 1940 and 1960, based on the Hennepin County historical sale register.

For a random sample of houses built between 1940 and 1960, we analyze data from Hennepin County’s historical records to determine the time gap between the end of construction and the first sale and the duration of time residents stayed in their homes. We identify whether each house is an Abstract or Torrens property and locate the corresponding sale document. We record the first sale month and year. Moving down the register, we find the next occurrence of sale for this house, which is the year of the first resale after the house

¹Zillow’s data were freely available under an academic license in 2019 but are no longer free.

was built and first sold. Appendix Table A.1 presents the mean and median differences between the build year and first sale year and between the first sale and resale years.

A.3 Building Permits Data and Housing Construction Start Year

Figure A.1: Example Page from a Building Permit Index Card

INSPECTOR OF BUILDINGS					
LOCATION 2901 - E. Minnehaha Parkway					
LOT W 45' of Lots 18 & 19 BLOCK 3 ADD. Pillsbury's Addn.					
PERMIT NO.	CONSTRUCTION	DATE	CONTRACTOR	COST	
B 332495	34x43.4-16 (2 sty) Fr. Single Dwlg; 21x24-8 Fr. Det. Garage	2/11/53	Chester R. Sazenski	25,000.	SCP 36521 S Filed
D 483860	Plbg.g pip,wat.htr., dishwasher & disp.	4/23/53	Paragon Plbg. Co.	1,950.	
F 494074	Wiring, Fixt.	5/5/53	O. B. Thompson Elec.	300.	
K 72094	Int. Plast.	5/19/53	Midwest Plasters	1,500.	
	Int. Lath.	5/19/53	Midwest Plasters	300.	
G 46896	Inst. h.w.htg.	6/16/53	South Side Plbg. Co.	2,150.	
D 492457	Plbg.	10/16/53	Paragon Plbg. Co.	250.	
M 108662	Inst. gas burner	10/4/55	So. Side Plbg. Co.	300.	
G 60921	Alt. H. W. Htg.	8/22/60	Bowler Co.	300.	
F 573954	Wir fixt.	8/24/60	O. B. Thompson	300.	
D 605276	rpl g w htr	4/12/61	Bowler Plbg.	150.	
D 737904	rpl gas wtr htr	3/3/71	Bowler Co.	100.	

Note: This figure illustrates a sample page from a building permit index card, showing the date the first building permit was issued for this house in February 1953, which marks the start of this house's construction.

The data from Hennepin County's office include only the year housing construction ended. For our analysis, we also need the year of housing construction start. To obtain these data, we use historical building permit data for the city of Minneapolis, showing the month and year the first building permit was issued from the Hennepin County library. The data were extracted with Amazon's Textract from 1,899 index permit card catalogs totaling 219,664 pages, covering all permits issued between 1884 and 1973 by the city of Minneapolis. Each permit card lists all building permits until 1973 for a specific set of lots in Minneapolis. For lots with multiple permits, there may be several associated permit card pages. Figure A.1 provides an example page from an index permit card catalog. The housing construction start date is the first permit issued for a lot starting with either A or B. For example, as shown in Figure A.1, construction on this house began in February 1953, making the start year 1953.

Table A.2: Summary Statistics: Difference Between Build Year and Construction Start Year

	<i>N</i>	Mean	<i>P</i> ₂	<i>P</i> ₂₅	Median	<i>P</i> ₇₅	<i>P</i> ₉₈	Mode
Δ Build Year – Construction Year	17,291	0.644	0	0	1	1	2	1

Note: This table shows the distribution of the difference between the build year (construction end) and housing start year for the houses for which we have raw data on both.

After processing and cleaning the output, we match the addresses on the index cards with those in our sample. This involves standardizing the addresses from both sources and restricting our sample to houses built between 1940 and 1964 to match index permit cards on the basis of street name, house number, lot, block, and addition (“ADD”). Some houses have multiple matches because they have multiple pages dedicated to a single address, and we take the earliest marked date. For those houses without a match in the first round, we focus on streets with the highest concentration of unmatched addresses and manually identify errors in the Textract text detection using the 1940 city atlas. This allows us to conduct a second round of matching with an updated list. The final match rate is 87.7% for 19,706 observations with build years between 1940 and 1960 in Minneapolis.

Table A.3: *t*-Test Difference between Housing Construction End and Start Years

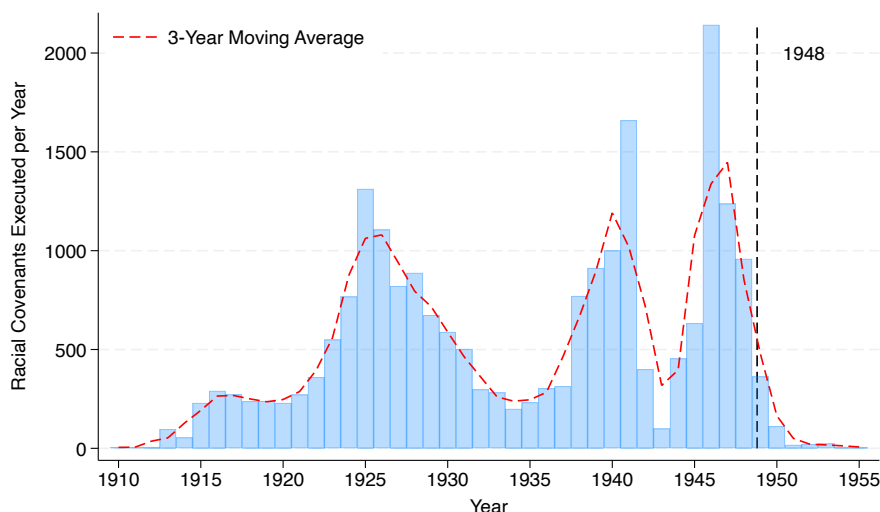
	<i>N</i>	Mean	Difference (Row 1 - Row 2)	<i>t</i> -Test <i>p</i> -value
Built 1940–48	6,562	0.636	–	–
Built 1949–60	10,729	0.649	-0.013	0.235

Note: This table provides the mean and the difference between housing construction end and start years for the sample of houses built between 1940 and 1948 and 1949 and 1960. The *p*-value from a *t*-test of the difference in means between 1940–1948 and 1949–1960 is also presented.

A total of 17,291 observations with both construction and build years are summarized in Table A.2. For housing with missing data, we impute the construction start year on the basis of the table’s statistics. The median and mode of the difference between construction end and start years is 1 year, while the mean difference is 0.64 years. Table A.3 shows the mean and the difference between housing construction end and start years for the sample of houses built between 1940 and 1948 and 1949 and 1960 and the *p*-value from a *t*-test of the difference in means between 1940–1948 and 1949–1960.

A.4 Racial Covenants Data

Figure A.2: Covenants Executed per Year



Note: This histogram shows the total number of covenants executed by year between 1910 and 1955. The dashed line at the end of 1948 represents when *Shelley v. Kramer* made covenants legally unenforceable. The 3-year moving average for the number of covenants executed is also displayed. The total number of covenants added after 1948 is 553.

The racial covenants data come from historical property sales deeds and subdivision maps from 1900 to 1960 in Hennepin County. There are 24,509 covenants in the baseline sample. We match each covenant to a parcel in three steps. First, we conduct exact matching on the basis of lot characteristics, including the addition or development number, name, and city block number, successfully matching 16,967 covenants. Second, we match remaining data if the geolocated covenant centroid falls within a parcel's polygon, which results in 7,276 additional matches. Third, we match the remaining covenants to the nearest parcel. We drop 2,536 duplicates, which leaves a final sample of 21,973 covenants. Figure A.2 shows the number of covenants executed per year, with a dashed line indicating *Shelley v. Kramer* in 1948, along with a 3-year moving average.

A.5 Census Data

We match parcel data to census data from 1940, 1960, 1980, 1990, 2000, 2010, and 2020. Census data from 1980 onward include the share of the population by race, those under 18, and home ownership and rental by race at the census block level. We exclude 1970 data because of noise in the race statistics. The 1960 census includes population data, racial

Table A.4: County Population Over Time and Sample Neighborhoods

Year	N	Percentage White	Percentage Black	Percentage Other Minority	Percentage American Indian & Native Alaskan	Percentage Asian & Pacific Islander	Level of Analysis
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1940	568,899	99.1	–	0.9	–	–	ED
1960	842,854	98.0	–	2.0	–	–	Tract
1980	941,411	93.5	3.5	3.0	1.1	1.0	Block
1990	1,032,431	89.3	5.8	4.8	1.4	2.9	Block
2000	1,116,200	80.5	9.0	10.5	1.0	4.8	Block
2010	1,154,623	76.3	11.5	12.2	0.8	6.2	Block
2020	1,281,565	66.7	13.4	19.9	0.9	7.7	Block

Note: This table provides the Hennepin County population, level of analysis, and percentages of White residents, Black residents, and Other racial minority residents in 1940, 1960, and 1980–2020. It also presents the percentages of American Indian and Native Alaskan and Asian and Pacific Islander residents between 1980 and 2020. Note that the percentages for American Indian and Native Alaskan and Asian and Pacific Islander residents do not have to equal the Other racial minorities category. The Other minorities category in 1980 and 1990 includes American Indian and Native Alaskan, Asian and Pacific Islander, and any other race. In 2000, 2010, and 2020, this category includes American Indian and Native Alaskan, Asian and Pacific Islander, any other race, and those of two or more races. Column 7 outlines the level of analysis for each census year: enumeration district (ED), census tract, or census block.

composition, and home ownership at the tract level, while tract-level data from 1940 are unavailable, so we use data at the level of enumeration districts (EDs), roughly equivalent to modern tracts. A spatial join matches each parcel to the corresponding block, tract, or ED, with 12 parcels unmatched to a 1990 census block.

The baseline race percentage construction classifies the population into White, Black, and Other minority categories. Table A.4 provides these percentages and total populations for 1940, 1960, and 1980–2020. For robustness, we further break down the Other category into American Indian/Native Alaskan and Asian/Pacific Islander populations, as these groups are consistently reported over time. Table A.4 also shows their percentages between 1980 and 2020. Note that the White, Black, and Other minority categories include both non-Hispanic and Hispanic residents, and we do not create a separate Hispanic percentage because this category is reported inconsistently across census years.

A.6 Data on Highways

The data on highways come from the Topologically Integrated Geographic Encoding and Referencing (TIGER) system provided by the Federal Highway Administration. We adopt the same definition of highways as Brinkman and Lin (2022), retaining all limited-access highways that connect to other roads only at interchanges, not at-grade intersections, classified as type S1100. This includes interstate highways and other limited-access highways, such as toll roads. In Hennepin County, the main highways are I-94 and I-35. We combine all highways into a multipolygon and calculate the Euclidean distance between this multipolygon and each parcel's centroid to determine the distance to the nearest highway. Additionally, we compute the travel distance in minutes between parcels and highways by downloading OpenStreetMap data for Minnesota and extracting all motorway notes. Using the latitude and longitude coordinates of housing units from the Hennepin County parcel data, we identify the closest highway entry and exit in terms of road distance. Travel time for each housing unit to the nearest highway node is then calculated with the Open Source Routing Machine (OSRM), with tags from the OSRM data helping to limit the highway nodes considered.

A.7 Data on Zoning Regulations

The Minnesota Star Tribune compiled land-use regulation data on minimum lot sizes and single-family zoning for 102 Minneapolis–St. Paul metro communities in 2021. Authors Webster and Corey (2021) shared these data with us. Some municipalities in Hennepin County are not included, resulting in 7 missing observations out of 732 census blocks in the baseline 2020 sample, totaling only 0.96% missing at the census block level. Although the data on zoning regulations were collected in 2020, Kulka et al. (2026) document remarkable persistence in zoning regulations over time.

A.8 Data on Lakes and Associated Parkways

We use two datasets to identify lakes and their associated parkways in Hennepin County: the Minnesota Land Cover Classification (MLCCS) data from the Minnesota Department of Natural Resources and the Minnesota Rivers and Lakes Shapefile from the Minnesota Metropolitan Council. The MLCCS classifies cultural features, nonnative vegetation,

and natural vegetation into a comprehensive land cover system, identifying 150 lakes in Hennepin County. Conversely, the Rivers and Lakes Shapefile recognizes many unnamed small bodies of water as lakes, totaling 511 lakes. To reconcile these datasets, we manually verify in Google Maps every water body not classified as a lake by the MLCCS. Ultimately, we identify 203 lakes in Hennepin County, most of which have associated parkways. We then combine all lakes into a multipolygon and calculate the distance from each parcel's centroid to the nearest lake.

A.9 Data on Racial Attitudes

Residents' racial attitudes in the 1960s are inferred from their voting patterns in the 1964 and 1968 congressional elections. We geocode the 1961 electoral map for Minneapolis precincts and wards, which remained unchanged until 1971. To proxy for present-day racial attitudes, we analyze minor civil disturbances following George Floyd's death on May 25, 2020, using data from the City of Minneapolis Office of Emergency Management. Our analysis focuses on disturbances coded as 0–25%, including graffiti and broken windows, while excluding incidents in high-profile areas within a 0.2-mile radius or bandwidth of key locations such as East 38th Street/Chicago Avenue (the site of the death), Minnehaha Avenue and East Lake Street (near the third precinct police station), and the entire Lake Street and Downtown areas.

References

Brinkman, Jeffrey, and Jeffrey Lin. "Freeway revolts! The quality of life effects of highways." *Review of Economics and Statistics*, 2022, 1-45.

Kulka, Amrita, Aradhya Sood, and Nicholas Chiumenti, "Under the (neighbor)Hood: Understanding Interactions Among Zoning Regulations," *manuscript*, 2026.

Webster, MaryJo and Michael Corey, "How Twin Cities housing rules keep the metro segregated," *Star Tribune*, July 2021.

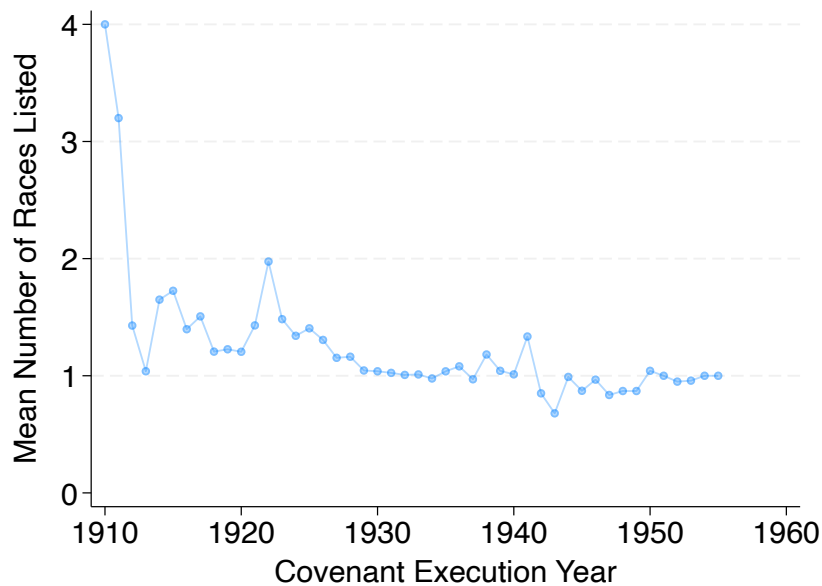
B. Definitions and Details on Measurements

B.1 Language Used in Racial Covenants

The language around race in the early to mid 20th-century is often ambiguous, particularly in racial covenants. While it might seem that specific phrases, such as those prohibiting

occupancy by individuals of “Chinese, Japanese, Moorish, Turkish, Negro, Mongolian, or African blood or descent,” specifically target certain races, it is more accurate to say that the terminology reflects the era in which the covenant was written. As shown in Figure B.1, the number of prohibited races listed in covenants decreased after the early 1910s, indicating evolving definitions of race and efforts to strengthen these covenants. By 1920, the language primarily focused on which races were permitted rather than specifying prohibited ones.

Figure B.1: Mean Number of Races Listed in Covenants Per Year



Note: This figure plots the mean number of races specified in racial covenant language per year between 1910 and 1955.

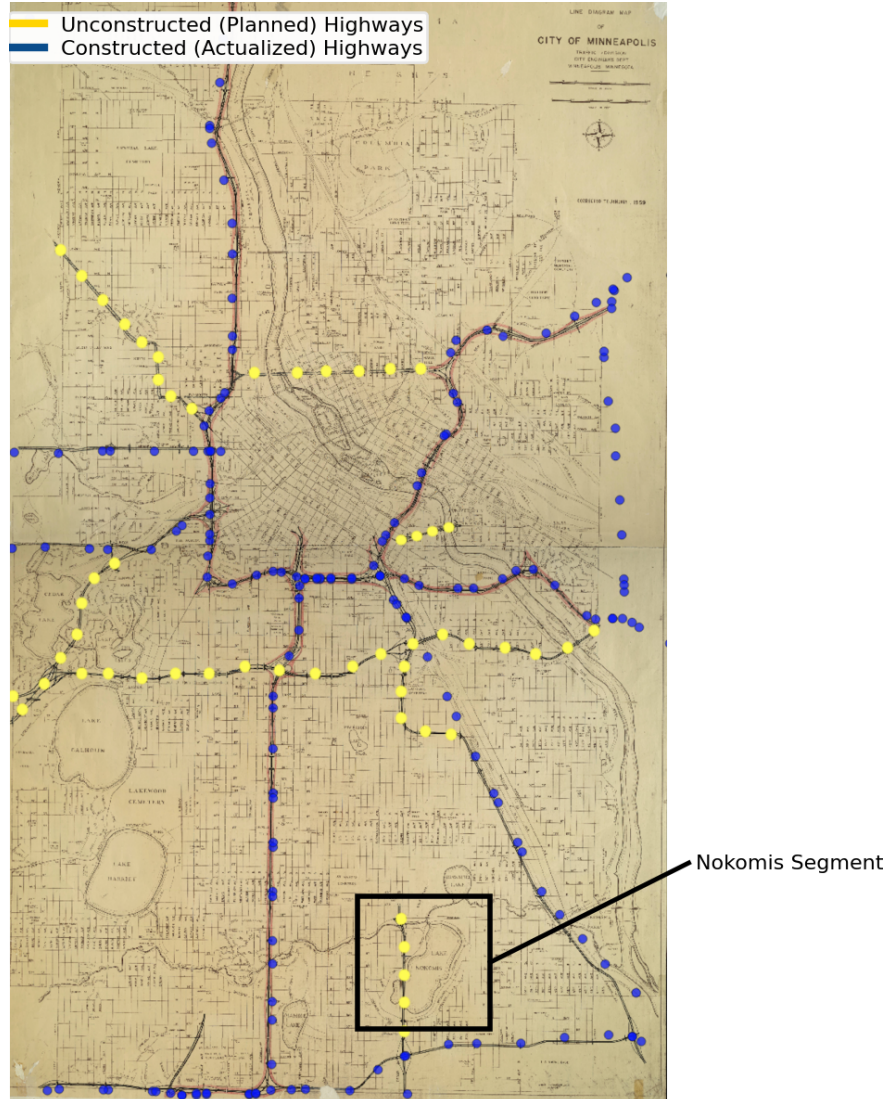
B.2 Timeline for Planning and Construction of Interstate Highways

Our analysis adopts the definition of highways from Brinkman and Lin (2022)—those outlined in category S1100 of the Census TIGER files. These interstate highways, which include route types I and U, were designed under the Federal-Aid Highway Act of 1956.

1940s: Although highway development plans were initiated by the state and county as early as 1944, none of these highways were ever constructed. We manually verify that none of the 12 highway plans for which maps exist were built, likely because the federal government became involved in the highway construction project in the 1950s.

1956: The Federal-Aid Highway Act was enacted to promote the construction of interstate

Figure B.2: Planned vs. Constructed Highways



Note: This figure shows a map of the 1957 plan for an interstate highway. The proposed routes are shown in black and red. On top of the map, the roads in blue dots denote the final constructed highways in the area. In yellow dots, we denote planned but unconstructed highways, including the Nokomis segment.

highways nationwide, significantly influencing local projects.

1957: Initial drafts for the interstate highway system were released to the public (Ramer and Walker, 2025), with plans disseminated through local newspapers. Figure B.2 shows the proposed routes in red and black from the 1957 plan.

1958: Preparation for the construction of I-35 began with the demolition of homes and neighborhoods in 1958 (Lloyd, 2013). However, between 1959 and 1974, public feedback and protests led to some reroutes and the cancellation of certain highway segments, as

illustrated in Figure B.2 where finalized routes are in blue and unrealized routes in yellow.

1959–1974: The 1957 plan was not fully implemented. A notable protest involved the proposed I-94 route, which would have threatened parkland by cutting through Lake Nokomis Park and requiring the demolition of nearby neighborhoods (as shown in Figure B.2). Specifically, it would have required 25 to 30 acres of parkland while bypassing a nearby industrial area. According to the description of the 1957 plan, this project would severely limit access to the remaining parkland. In 1968, the Department of Highways attempted condemnation proceedings but faced delays (Ramer and Walker, 2025). Former Mayor P. Kenneth Peterson publicly opposed removing homes from tax rolls, stating it was “unthinkable” to displace them when open land was available. Due to mounting pressure, this project segment was nearly abandoned by 1974.

B.3 Timeline for Proposal and Adoption of Zoning Regulations

Hennepin County’s first zoning regulations were adopted in 1924 in Minneapolis, aimed at separating industrial, commercial, and residential areas. A comprehensive zoning plan was introduced in 1948, following planning efforts that started in 1946. This plan included restrictions on multifamily housing, maximum density requirements, and minimum parking standards. In 1963, amendments added minimum lot size requirements and other regulations. There were few changes to the 1963 zoning plan until 2020. Suburban municipalities such as St. Louis Park (1956), New Hope (1966), and Brookfield (1972) began adopting their own comprehensive zoning laws from the 1950s to the 1970s.²

B.4 Timeline for Construction of Lakes and Associated Parkways

This section provides a timeline for the construction of lakes and associated parkways in Hennepin County. Regarding the timeline for parks and associated parkways in Minneapolis, we obtain these dates from Minneapolis Parks’ official website.

1883–1913: The Minneapolis park board was created, with initial plans to acquire land encircling Lake Harriet. A major project involved dredging the Lake of the Isles and completing a channel between Cedar Lake and Lake of the Isles by 1913.

1920s: In 1922, the park board purchased land around Rice Lake (now Lake Hiawatha), as

²Dates based on our research of zoning ordinance maps across archives in Hennepin County.

it was the only suitable site for a golf course in South Minneapolis. From 1929 to 1931, the lake was dredged, and the golf course was constructed.

1930s: In 1931, the Minnehaha Creek bed was graded and redirected. In 1936, the park board acquired 72.32 acres around Pearl and Diamond Lakes, and by 1939, it owned 8.54 acres on the bed of Diamond Lake.

1940s: In 1947, Lake Nokomis's dimensions changed to add 0.8 acres on its east side.

1950s and 1960s: The park board completed its acquisition of Cedar Lake's shore in the 1950s and, in 1968, added 14 acres to Cedar Lake Park. Additionally, land north of Lake Hiawatha was filled to expand the golf course.

B.5 Neighborhood Sample Construction

The sample of neighborhoods used in the analysis—census blocks—is selected according to two criteria. The first restriction is that at least 50% or 75% of the housing units in the block must have had covenants, regardless of the year the covenant was executed ($\underline{c}_{jt} \geq 50, 75$), as explained in the main text. The second restriction is:

$$(\% \text{built/start} \leq 1948)_{jt} = \frac{(\text{built/start1940} - 48)_j * 100}{(\text{built/start1940} - 60)_j} \quad \text{if } \underline{b}_{jt} \geq 0.5, 0.75$$

$$\text{where } \underline{b}_{jt} = \frac{(\text{built/start1940} - 60)_j}{(\text{all houses})_{jt}}$$

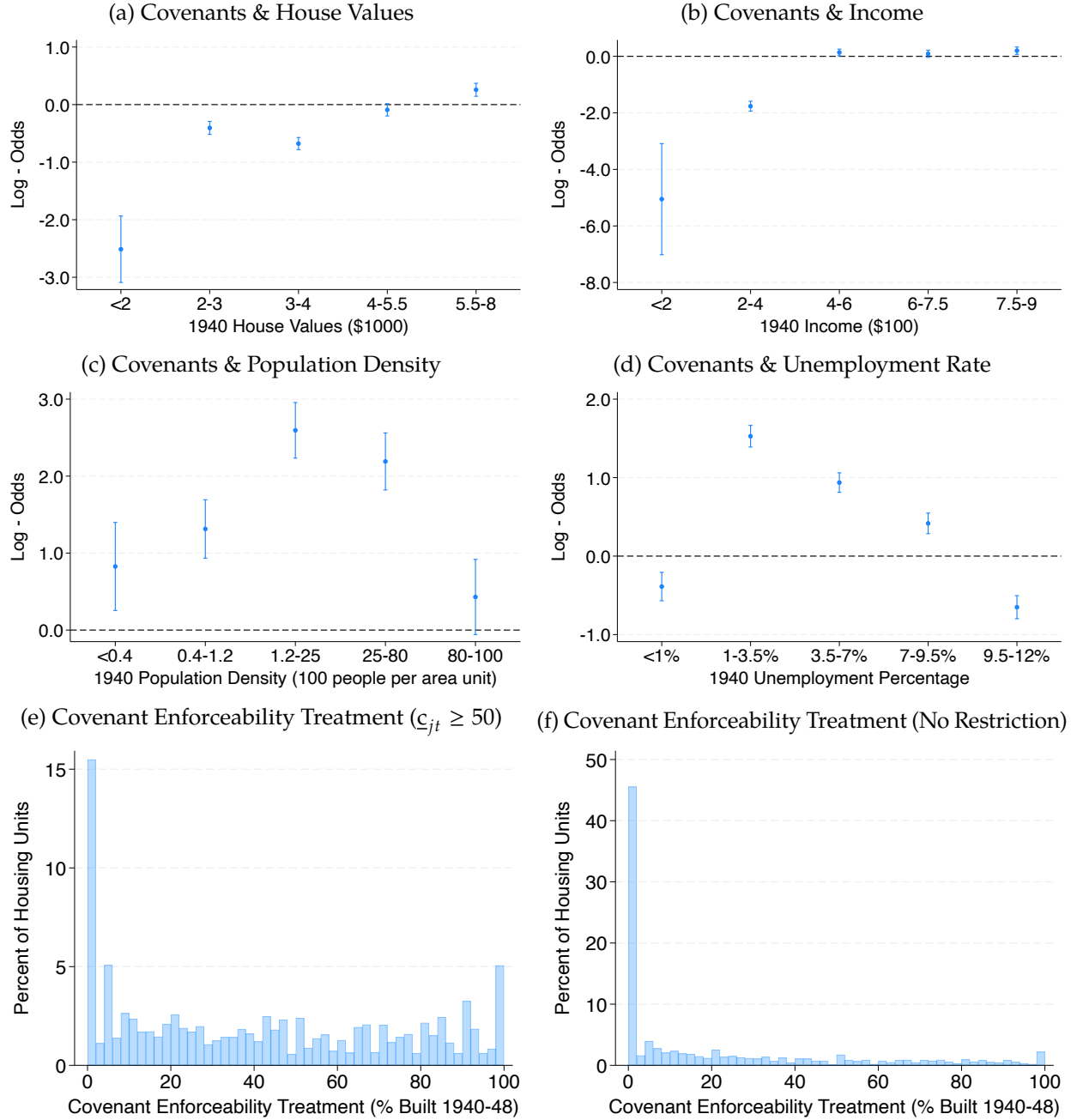
where $(\text{built/start1940} - 48)_j$ is the number of houses in block j with construction start or end between 1940 and 1948, $(\text{built/start1940} - 60)_j$ is the total houses started or built between 1940 and 1960, and $\underline{b}_{jt}$ is the share of houses started or built between 1940 and 1960 out of all houses in block j in decennial year t ($(\text{all houses})_{jt}$). The baseline sample requires $\underline{b}_{jt} \geq 0.5$ and $\underline{c}_{jt} \geq 50$. Additional samples have $\underline{b}_{jt} \geq 0.75$ and $\underline{c}_{jt} \geq 75$.

References

- Brinkman, Jeffrey, and Jeffrey Lin. "Freeway revolts! The quality of life effects of highways." *Review of Economics and Statistics*, 2022, 1-45.
- Lloyd, Ernest Lee. "How Routing an Interstate Highway through South Minneapolis Disrupted an African-American Neighborhood." Ph.D. thesis (2013).
- Ramer, Hannah and Rebecca Walker, *Freeways and the Park System in Minneapolis*, University of Minnesota Press, 2025.

C. Additional Results

Figure C.1: Covenants in Transition (Additional Var.) & Enforceability Treatment (Housing Units)



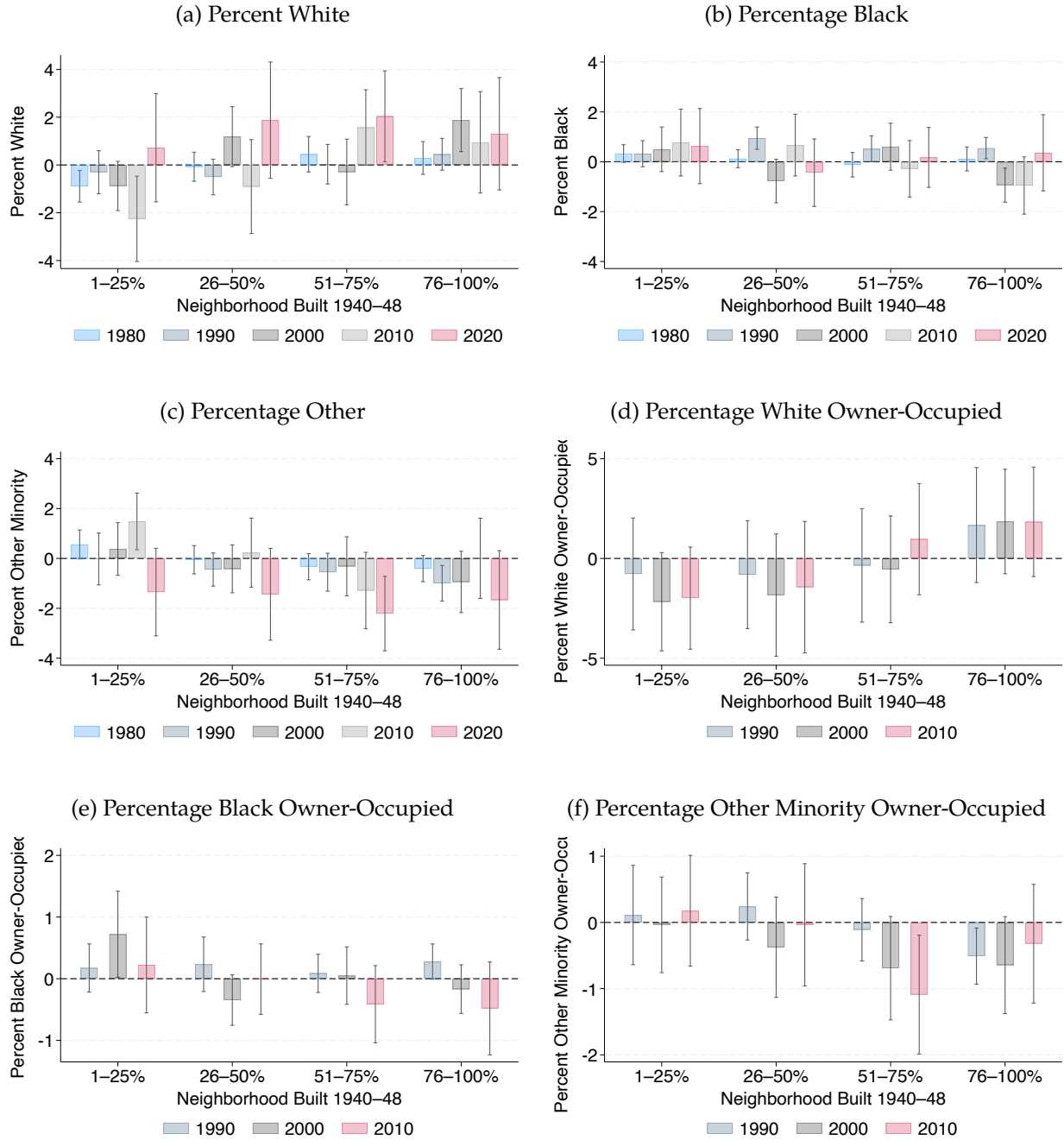
Note: This is a companion figure to Figure 3. Panels (a), (b), (c), and (d) plot the estimated log-odds (relative to the omitted base category, which is always the final bin) of addition of a covenant after 1940 from a logit specification whose independent variables are the average house value, average income, population density, and unemployment rate, all measured at the enumeration district level in 1940. Panel (e) shows the distribution of the covenant enforceability treatment, $(\%built \leq 1948)_{jt}$ from Equation 2, where the sample is restricted to neighborhoods in which at least 50% of the housing units had covenants ($\%cov\ houses_{jt} \geq \mathbb{C}_{jt} = 50$) and Panel (f) the distribution of the treatment with no restriction on the share of units with covenants ($\%cov\ houses_{jt} \geq \mathbb{C}_{jt} = 0$) for houses built between 1940 and 1960 and the 2020 census blocks sample.

Table C.1: Effects on Housing Characteristics: Robustness 1

Dependent Variable	α_1	s.e. (cluster)	s.e. (robust)	N	R^2	Effect of 1 SD increase	Mean of Dep. Variable
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: 1940–1960 w/ Buildings Built 1940–60, $c_{jt} \geq 50$, no remodeling restriction</i>							
Log Built Area	0.0008***	(0.0003)	[0.0002]	10,027	0.502	2.46	–
No. Bedrooms	0.0006	(0.0004)	[0.0003]	10,261	0.113	–	3.11
No. Bathrooms	0.0006*	(0.0003)	[0.0002]	10,259	0.333	0.02	1.56
No. Floors	0.001***	(0.0002)	[0.0001]	10,048	0.158	0.04	1.22
<i>Panel B: 1940–1960 w/ Buildings Built 1944–1953, $c_{jt} \geq 50$</i>							
Log Built Area	0.001**	(0.0004)	[0.0003]	3,912	0.518	3.43	–
No. Bedrooms	0.001**	(0.0006)	[0.0005]	4,104	0.140	0.04	3.02
No. Bathrooms	0.001***	(0.0005)	[0.0004]	4,104	0.347	0.04	1.53
No. Floors	0.001***	(0.0003)	[0.0002]	4,066	0.182	0.04	1.25
<i>Falsification:</i>							
Log Lot Size	-0.0002	(0.0002)	[0.00010]	7,486	0.737	–	–
<i>Panel C: 1944–1953 w/ Buildings Built 1944–1953, $c_{jt} \geq 50$</i>							
Log Built Area	0.0006	(0.0004)	[0.0003]	3,368	0.504	–	–
No. Bedrooms	0.0009	(0.0006)	[0.0005]	3,547	0.134	–	3.02
No. Bathrooms	0.0009*	(0.0005)	[0.0004]	3,547	0.333	0.03	1.50
No. Floors	0.001***	(0.0003)	[0.0002]	3,513	0.178	0.03	1.24
<i>Falsification:</i>							
Log Lot Size	-0.0003	(0.0002)	[0.0001]	6,569	0.745	–	–
Dependent Variable	α_3	s.e. (cluster)	s.e. (robust)	N	R^2	Effect of 1 SD increase	Mean of Dep. Variable
<i>Panel D: α_3 from Baseline (Reported in Table 2 Panel A)</i>							
Log Built Area	-0.006	(0.014)	[0.010]	5,642	0.513	–	–
No. Bedrooms	-0.027*	(0.014)	[0.012]	5,876	0.144	-0.03	3.08
No. Bathrooms	-0.015	(0.013)	[0.009]	5,876	0.352	–	1.60
No. Floors	-0.011	(0.007)	[0.004]	5,769	0.200	–	1.25

Note: Panels A–C present the parameter estimate α_1 (column 1) from Equation 2 with dependent variables representing housing characteristics. Standard errors clustered at the census block level appear in parentheses (column 2) and robust standard errors in brackets (column 3). Panel A includes all houses in the sample, whether remodeled or not. Panels B and C restrict the sample to houses built between 1944 and 1953 ($c_{jt} = 0$). Panel B (C) includes census blocks at least 50% built between 1940 and 1960 (1944 and 1953), with $c_{jt} \geq 50$. Panel D presents the parameter estimate α_3 (column 1) from Equation 2 for the baseline effects reported in Table 2 Panel A. The effect of a 1-standard-deviation (SD) increase in covenant enforceability intensity for statistically significant variables is given in column 6. The means of the non-log dependent variables are given in column 7. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure C.2: Nonlinear Sorting Effects



Note: This figure plots the parameter estimates β_m for $m = 1-25\%$, $26-50\%$, $51-75\%$, $76-100\%$, where the omitted category is $m = 0\%$, similar to Equation 3. The dependent variables are resident percentages by race (Panels a-c) and percentages of owner-occupied housing units by race (Panels d-f) over time. Standard errors are clustered at census tract level, and 90% confidence intervals are reported. The sample of census blocks is restricted to those where at least 50% of the housing was built between 1940 and 1960 and at least 50% was covenanted ($\mathbb{C}_{jt} \geq 50$).

Table C.2: Racial Segregation 1980–2020: Additional Racial Groups

	α_1	s.e. (cluster)	s.e. [robust]	N	R^2	Effect of 1 SD increase	Mean of Dep. Variable
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A Dependent Variable: Percentage of American Indian & Native Alaskan Residents</i>							
1980	-0.001	(0.001)	[0.001]	830	0.152	–	0.25
1990	0.001	(0.001)	[0.001]	830	0.160	–	0.35
2000	-0.002	(0.002)	[0.002]	795	0.162	–	0.39
2010	-0.002	(0.002)	[0.002]	791	0.118	–	0.43
2020	0.001	(0.003)	[0.003]	731	0.231	–	0.83
<i>Panel B Dependent Variable: Percentage of Asian and Pacific Islander Residents</i>							
1980	-0.006	(0.004)	[0.004]	830	0.110	–	0.89
1990	-0.016***	(0.005)	[0.006]	830	0.117	-0.53	1.54
2000	-0.019**	(0.009)	[0.008]	795	0.140	-0.64	2.37
2010	-0.025***	(0.008)	[0.008]	791	0.177	-0.83	3.12
2020	-0.008	(0.007)	[0.008]	731	0.165	–	4.08
<i>Panel C Dependent Variable: Percentage of American Indian Owner-Occupied Housing Units</i>							
1990	0.001	(0.001)	[0.001]	830	0.117	–	0.21
2000	0.001	(0.001)	[0.001]	795	0.243	–	0.18
2010	0.001	(0.001)	[0.001]	791	0.125	–	0.21
<i>Panel D Dependent Variable: Percentage of Asian and Pacific Islander Owner-Occupied Housing Units</i>							
1990	-0.011***	(0.003)	[0.003]	830	0.129	-0.37	0.66
2000	-0.016***	(0.005)	[0.005]	795	0.141	-0.52	1.25
2010	-0.018***	(0.005)	[0.006]	791	0.139	-0.60	1.83

Notes: This table displays the parameter estimate α_1 (column 1) from Equation 1. The dependent variables are resident percentages by race—American Indian/Native Alaskan and Asian/Pacific Islander (Panels A and B)—and percentages of owner-occupied housing units by race—American Indian/Native Alaskan and Asian/Pacific Islander (Panels C and D)—over time. Standard errors clustered at census tract level are in parentheses (column 2) and robust standard errors in brackets (column 3). The sample of census blocks is limited to those where at least 50% of the census block was built between 1940 and 1960 and at least 50% had racial covenants ($\mathbb{C}_{jt} \geq 50$). Column 6 is the effect of a 1-standard-deviation (SD) increase in intensity of the covenant enforceability treatment for statistically significant variables. Column 7 shows means of the dependent (Dep.) variables. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C.3: Long-Run House Value Effects: Robustness

Dependent Variable	α_1	s.e. (cluster)	N	R^2	Effect of 1 SD increase
	(1)	(2)	(3)	(4)	(5)
<i>Panel A: Baseline + House Characteristics</i>					
Log Assessed Value (2019)	0.0007***	(0.0001)	10,960	0.843	2.53
Log Sales Price (2010–2019)	0.0011***	(0.0003)	4,346	0.441	3.57
<i>Panel B: Baseline + House Characteristics + Local Amenities</i>					
Log Assessed Value (2019)	0.0007***	(0.0001)	10,932	0.844	2.28
Log Sales Price (2010–2019)	0.0010***	(0.0003)	4,331	0.440	3.36
<i>Panel C: Baseline + House Characteristics + Local Amenities + SES Controls</i>					
Log Assessed Value (2019)	0.0005***	(0.0001)	10,607	0.841	1.64
Log Sales Price (2010–2019)	0.0008***	(0.0003)	4,190	0.449	2.69
<i>Panel D: Baseline + House Characteristics + Local Amenities + Time to Housing Start</i>					
Log Assessed Value (2019)	0.0007***	(0.0001)	10,932	0.844	2.28
Log Sales Price (2010–2019)	0.0010***	(0.0003)	4,331	0.440	3.36
<i>Panel E: 1947–1948 Missing</i>					
Log Assessed Value (2019)	0.0016***	(0.0003)	646	0.779	5.70
Log Sales Price (2010–2019)	0.0049**	(0.0025)	246	0.400	19.33
<i>Panel F: 1948 Missing</i>					
Log Assessed Value (2019)	0.0018***	(0.0003)	629	0.785	6.51
Log Sales Price (2010–2019)	0.0049**	(0.0020)	241	0.409	19.46
<i>Panel G: Baseline + Covenant Language</i>					
Log Assessed Value (2019)	0.0009***	(0.0002)	11,438	0.733	3.09
Log Sales Price (2010–2019)	0.0013***	(0.0003)	4,610	0.414	4.37
<i>Panel H: 1944–1953 w/ Buildings Built 1940–1960</i>					
Log Assessed Value (2019)	0.0005**	(0.0002)	8,443	0.740	1.40
Log Sales Price (2010–2019)	0.0009***	(0.0003)	3,398	0.433	2.75
<i>Panel I: 1940–1960 w/ Buildings Built 1940–1960, $c_{jt} \leq 10$</i>					
Log Assessed Value (2019)	-0.0003*	(0.0002)	57,394	0.603	-0.71
Log Sales Price (2010–2019)	0.0003	(0.0003)	23,083	0.406	–
<i>Panel J: 1940–1960 w/ Buildings Built 1940–1960, $c_{jt} \leq 25$</i>					
Log Assessed Value (2019)	-0.0002	(0.0002)	60,793	0.605	–
Log Sales Price (2010–2019)	0.0003	(0.0002)	24,436	0.407	–
<i>Panel K: 1940–1960 w/ Buildings Built 1940–1960, $c_{jt} \leq 35$</i>					
Log Assessed Value (2019)	-0.0003*	(0.0001)	62,468	0.606	-0.65
Log Sales Price (2010–2019)	0.0003	(0.0002)	25,119	0.405	–

Note: This table displays parameter estimate α_1 (column 1) from Equation 2. The dependent variables are the log of assessed value (2019) and the log of the sales price (2010–2019). Standard errors are clustered at the census block level (column 2). Panel A includes housing characteristics controls—log lot size and built area, number of bedrooms, bathrooms and floors, and indicators for house remodeling and property type. Panel B additionally includes local public amenities—Euclidean distance to highways, minimum lot size, and share of neighborhood zoned for single-family. Panel C additionally controls for share over age 19, block population, median income, and any college education. Panel D additionally controls for *time to housing start*. Panels E and F remove the years 1947–1948 and only 1948, respectively, from the baseline analysis. Panel G controls for the total number of racial groups listed in the covenant language. Panel H restricts sample to housing built in 1944–1953, where $(\%built \leq 1948)_{jt}$ in Equation 2 is at least 50% built between 1940 and 1960. Panels I–K use samples with at most 10%, 25%, and 35% covenanted housing ($c_{jt} \leq 10, 25, 35$) in the neighborhood. The effect of a 1-standard-deviation (SD) increase in covenant enforceability intensity for statistically significant variables is given in column 5. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C.4: Effects on Housing Characteristics: Robustness 2

Dependent Variable	α_1	s.e. (cluster)	s.e. (robust)	N	R^2	Effect of 1 SD increase	Mean of Dep. Variable
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: 1940–1960 w/ Buildings Built 1940–1960, $c_{jt} = 0$</i>							
Log Built Area	-0.0003*	(0.0002)	[0.0002]	20,332	0.603	-0.91	–
No. Bedrooms	-0.002***	(0.0003)	[0.0003]	20,800	0.271	-0.05	3.05
No. Bathrooms	-0.0004	(0.0003)	[0.0002]	20,794	0.334	–	1.55
No. Floors	0.0009***	(0.0001)	[0.00009]	19,520	0.251	0.03	1.17
<i>Falsification:</i>							
Log Lot Size	-0.0006***	(0.0002)	[0.00010]	43,778	0.647	-1.35	–
<i>Panel B: 1940–1960 w/ Buildings Built 1940–1960, $c_{jt} \leq 10$</i>							
Log Built Area	-0.0003	(0.0002)	[0.0001]	22,132	0.601	–	–
No. Bedrooms	-0.002***	(0.0003)	[0.0002]	22,625	0.264	-0.05	3.05
No. Bathrooms	-0.0004	(0.0003)	[0.0002]	22,619	0.329	–	1.57
No. Floors	0.001***	(0.0001)	[0.00008]	21,268	0.244	0.03	1.17
<i>Falsification:</i>							
Log Lot Size	-0.0007***	(0.0002)	[0.00009]	46,648	0.644	-1.77	–
<i>Panel C: 1940–1960 w/ Buildings Built 1944–1953, $c_{jt} = 0$</i>							
Log Built Area	-0.0004	(0.0002)	[0.0002]	10,020	0.612	–	–
No. Bedrooms	-0.001***	(0.0004)	[0.0003]	10,268	0.191	-0.04	2.93
No. Bathrooms	-0.0001	(0.0003)	[0.0002]	10,265	0.326	–	1.53
No. Floors	0.0004**	(0.0002)	[0.0001]	10,153	0.272	0.01	1.20
<i>Falsification:</i>							
Log Lot Size	-0.0007***	(0.0003)	[0.0001]	19,585	0.656	-1.96	–
<i>Panel D: 1940–1960 w/ Buildings Built 1944–1953, $c_{jt} \leq 10$</i>							
Log Built Area	-0.0002	(0.0002)	[0.0002]	11,063	0.609	–	–
No. Bedrooms	-0.0009**	(0.0004)	[0.0003]	11,323	0.187	-0.03	2.94
No. Bathrooms	0.0002	(0.0003)	[0.0002]	11,320	0.317	–	1.54
No. Floors	0.0005***	(0.0002)	[0.0001]	11,190	0.266	0.01	1.21
<i>Falsification:</i>							
Log Lot Size	-0.0009***	(0.0002)	[0.0001]	21,209	0.655	-2.45	–

Note: This table presents the parameter estimate α_1 (column 1) from Equation 2 with dependent variables representing housing characteristics. Standard errors clustered at the census block level appear in parentheses (column 2) and robust standard errors in brackets (column 3). In Panel A, the sample of census blocks is restricted to those at least 50% built between 1940 and 1960, with no restrictions on racial covenants ($c_{jt} = 0$). Additional restrictions include houses built between 1940 and 1960. Panel B modifies the restriction on racial covenants ($c_{jt} \leq 10$). Panels C and D also modify the restriction on racial covenants for the sample of houses built between 1944 and 1953 (at least 50% built between 1940 and 1960) to $c_{jt} = 0$ and $c_{jt} \leq 10$, respectively. The effect of a 1-standard-deviation (SD) increase in covenant enforceability intensity for statistically significant variables is given in column 6. The means of the non-log dependent variables are given in column 7. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C.5: Racial Segregation in Owner-Occupied Units 1980–2010: Robustness

Samples/ Models	(I) Alt. Ownership I (Including Vacant Units in Denominator)					(II) Alt. Ownership II (Owner-Occupied Units as Denominator)					(III) Zipcode FE				(IV) $\geq 75\%$ Built 1940–1960 & $\underline{c}_{jt} \geq 75$			
	α_1	s.e.	N	R^2	$E(Y)$	α_1	s.e.	N	R^2	$E(Y)$	α_1	s.e.	N	R^2	α_1	s.e.	N	R^2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
<i>Panel A: Percentage of White Owner-Occupied</i>																		
1980	0.023	(0.032)	692	0.182	85.87	-0.00003	(0.00005)	649	0.503	99.79	0.007	(0.019)	660	0.155	0.024	(0.021)	442	0.245
1990	0.050***	(0.017)	830	0.261	87.75	0.012**	(0.005)	829	0.168	97.99	0.045***	(0.015)	840	0.171	0.054**	(0.021)	558	0.303
2000	0.068***	(0.021)	795	0.270	87.44	0.030***	(0.009)	794	0.274	95.91	0.041**	(0.016)	799	0.185	0.070***	(0.026)	513	0.302
2010	0.065**	(0.025)	791	0.324	80.31	0.028**	(0.013)	788	0.294	93.68	0.040**	(0.017)	797	0.219	0.081**	(0.035)	483	0.358
<i>Panel B: Percentage of Black Owner-Occupied</i>																		
1980	0.000001	(0.000002)	692	0.503	0.16	0.00003	(0.00005)	649	0.503	0.21	-0.0002	(0.0004)	660	0.335	–	(–)	442	.
1990	-0.002	(0.002)	830	0.180	0.77	-0.003	(0.002)	829	0.172	0.90	-0.003**	(0.002)	840	0.229	-0.004	(0.003)	558	0.238
2000	-0.010**	(0.005)	795	0.275	1.43	-0.014***	(0.005)	794	0.300	1.65	-0.011*	(0.006)	799	0.234	-0.009	(0.006)	513	0.303
2010	-0.007	(0.006)	791	0.195	1.77	-0.012	(0.008)	788	0.250	2.16	-0.007	(0.006)	797	0.159	-0.006	(0.007)	483	0.215
<i>Panel C: Percentage of Other Minority Owner-Occupied</i>																		
1990	-0.009**	(0.003)	830	0.110	0.99	-0.010***	(0.003)	829	0.112	1.11	-0.007***	(0.002)	840	0.058	-0.006*	(0.004)	558	0.144
2000	-0.013**	(0.006)	795	0.149	2.13	-0.015**	(0.006)	794	0.149	2.44	-0.011**	(0.004)	799	0.100	-0.011	(0.006)	513	0.151
2010	-0.013*	(0.007)	791	0.190	3.47	-0.016	(0.010)	788	0.219	4.16	-0.008	(0.006)	797	0.105	-0.012	(0.011)	483	0.196

Note: This table reports the parameter estimate α_1 from Equation 1. The dependent variables represent the percentage of owner-occupied housing units by race for 1980–2010. Standard errors are clustered at the census tract level unless otherwise stated. Columns Groups I and II use alternative ownership measures. The means of the dependent variables ($E(Y)$) are reported in Column Groups I and II. Column Group III adds zip code fixed effects $\eta_{k(j)}$ with zip code–clustered standard errors. Column Group IV restricts the sample to census blocks with $\geq 75\%$ built 1940–1960 and $\underline{c}_{jt} \geq 75$. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C.6: Racial Segregation 1980–2020: Additional Robustness

	(I) + SES Controls				(II) + Time to Housing Start				(III) Removing 1947 & 1948				(IV) Removing 1948 Only				(V) + Covenant Language			
	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
<i>Panel A: Percentage of White Residents</i>																				
1980	0.011**	(0.005)	788	0.170	0.011***	(0.004)	830	0.159	0.006	(0.004)	863	0.479	0.009**	(0.004)	861	0.497	0.012***	(0.004)	830	0.153
1990	0.020**	(0.007)	830	0.200	0.017**	(0.007)	830	0.192	0.012*	(0.006)	874	0.360	0.015**	(0.006)	865	0.362	0.017**	(0.007)	830	0.195
2000	0.033***	(0.012)	793	0.339	0.034***	(0.012)	795	0.330	0.033***	(0.011)	843	0.379	0.035***	(0.011)	833	0.382	0.035***	(0.012)	795	0.331
2010	0.052***	(0.018)	791	0.449	0.042**	(0.019)	791	0.417	0.058***	(0.017)	846	0.416	0.055***	(0.017)	833	0.423	0.044**	(0.019)	791	0.416
2020	0.026	(0.019)	707	0.459	0.035*	(0.020)	731	0.430	0.030	(0.019)	798	0.436	0.042**	(0.020)	783	0.425	0.038*	(0.020)	731	0.428
<i>Panel B: Percentage of Black Residents</i>																				
1980	-0.002	(0.003)	788	0.149	-0.003	(0.002)	830	0.130	-0.002	(0.004)	863	0.665	-0.003	(0.003)	861	0.702	-0.003	(0.002)	830	0.128
1990	-0.003	(0.004)	830	0.227	-0.002	(0.003)	830	0.220	-0.005	(0.004)	874	0.528	-0.005	(0.003)	865	0.537	-0.002	(0.003)	830	0.225
2000	-0.019***	(0.006)	793	0.321	-0.018***	(0.006)	795	0.309	-0.019***	(0.007)	843	0.410	-0.020***	(0.007)	833	0.402	-0.018***	(0.007)	795	0.310
2010	-0.018**	(0.009)	791	0.347	-0.015	(0.009)	791	0.326	-0.026***	(0.009)	846	0.329	-0.028***	(0.008)	833	0.330	-0.017*	(0.010)	791	0.325
2020	-0.002	(0.014)	707	0.349	-0.003	(0.013)	731	0.329	-0.018*	(0.011)	798	0.327	-0.019*	(0.011)	783	0.324	-0.005	(0.013)	731	0.328
<i>Panel C: Percentage of Other Minority Residents</i>																				
1980	-0.009**	(0.004)	788	0.142	-0.008**	(0.004)	830	0.137	-0.004	(0.003)	863	0.130	-0.006*	(0.003)	861	0.134	-0.009**	(0.004)	830	0.133
1990	-0.017***	(0.006)	830	0.134	-0.016***	(0.006)	830	0.129	-0.007	(0.005)	874	0.120	-0.010**	(0.005)	865	0.123	-0.015***	(0.006)	830	0.128
2000	-0.014	(0.010)	793	0.211	-0.015	(0.010)	795	0.207	-0.014*	(0.008)	843	0.214	-0.015*	(0.009)	833	0.216	-0.016	(0.010)	795	0.205
2010	-0.034**	(0.014)	791	0.356	-0.026*	(0.014)	791	0.323	-0.032**	(0.014)	846	0.320	-0.027**	(0.013)	833	0.328	-0.027*	(0.014)	791	0.324
2020	-0.023	(0.016)	707	0.379	-0.031*	(0.017)	731	0.341	-0.012	(0.019)	798	0.338	-0.022	(0.019)	783	0.330	-0.033*	(0.018)	731	0.341
<i>Panel D: Percentage of White Owner-Occupied Housing Units</i>																				
1980	0.006	(0.016)	635	0.360	0.003	(0.018)	649	0.243	0.050	(0.039)	863	0.192	0.072*	(0.042)	861	0.197	0.007	(0.018)	649	0.240
1990	0.033**	(0.015)	830	0.410	0.044**	(0.017)	830	0.276	0.049***	(0.016)	874	0.283	0.042**	(0.017)	865	0.280	0.046**	(0.018)	830	0.275
2000	0.056***	(0.018)	793	0.408	0.062***	(0.019)	795	0.274	0.066***	(0.016)	843	0.284	0.062***	(0.017)	833	0.280	0.064***	(0.020)	795	0.273
2010	0.071***	(0.020)	791	0.417	0.066***	(0.022)	791	0.355	0.078***	(0.024)	846	0.336	0.080***	(0.025)	833	0.335	0.074***	(0.025)	791	0.346
<i>Panel E: Percentage of Black Owner-Occupied Housing Units</i>																				
1980	-0.000	(0.000)	635	0.552	0.000	(0.000)	649	0.503	-0.003	(0.003)	863	0.863	-0.001	(0.001)	861	0.974	0.000	(0.000)	649	0.503
1990	-0.003	(0.002)	830	0.186	-0.002	(0.002)	830	0.182	-0.004	(0.004)	874	0.587	-0.003	(0.002)	865	0.651	-0.002	(0.002)	830	0.187
2000	-0.010**	(0.004)	793	0.281	-0.010**	(0.004)	795	0.277	-0.009*	(0.005)	843	0.431	-0.010**	(0.005)	833	0.426	-0.010**	(0.005)	795	0.279
2010	-0.007	(0.006)	791	0.212	-0.007	(0.006)	791	0.202	-0.009	(0.006)	846	0.279	-0.010	(0.006)	833	0.283	-0.007	(0.006)	791	0.202
<i>Panel F: Percentage of Other Minority Owner-Occupied Housing Units</i>																				
1990	-0.010***	(0.004)	830	0.116	-0.009**	(0.003)	830	0.113	-0.005	(0.004)	874	0.108	-0.007*	(0.004)	865	0.108	-0.009**	(0.003)	830	0.110
2000	-0.012**	(0.006)	793	0.151	-0.013**	(0.006)	795	0.150	-0.011**	(0.005)	843	0.150	-0.015***	(0.005)	833	0.161	-0.013**	(0.006)	795	0.149
2010	-0.015**	(0.007)	791	0.212	-0.013*	(0.008)	791	0.197	-0.010	(0.007)	846	0.196	-0.010	(0.008)	833	0.201	-0.014*	(0.007)	791	0.201

Note: This table reports α_1 parameter estimates from Equation 1 for four robustness checks: Column Group I add SES controls (share over age 19, block population, median income, and any college education) to the baseline; Column Group II adds the *time to housing start* control to the baseline. Column Group III removes years 1947 and 1948 from the baseline analysis, while Column Group IV removes 1948 only. Column Group V adds a control for the mean number of racial groups listed in the covenant language in a block. Dependent variables are percentages of residents or owner-occupied housing units by race over time. Standard errors clustered at the census tract level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C.7: Racial Segregation 1980–2020: Additional Placebo Tests

	(I) Cov ≤ 10				(II) Cov ≤ 25				(III) Cov ≤ 35				(IV) Entropy Balancing ($c_{jt} = 0$)			
	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
<i>Panel A: Percentage of White Residents</i>																
1980	0.006	(0.004)	5,521	0.757	0.006	(0.004)	5,731	0.755	0.007	(0.004)	5,848	0.753	0.006	(0.005)	5,303	0.703
1990	0.005	(0.004)	5,661	0.753	0.006	(0.004)	5,873	0.749	0.007	(0.004)	5,979	0.748	0.007	(0.004)	5,446	0.684
2000	0.008	(0.006)	5,547	0.758	0.010	(0.006)	5,751	0.757	0.010*	(0.006)	5,851	0.755	0.008	(0.007)	5,334	0.649
2010	0.019**	(0.008)	5,437	0.666	0.020**	(0.008)	5,634	0.661	0.020***	(0.007)	5,730	0.660	0.019**	(0.008)	5,226	0.597
2020	0.020**	(0.010)	4,954	0.623	0.021**	(0.010)	5,153	0.621	0.020**	(0.010)	5,245	0.621	0.016	(0.011)	4,754	0.573
<i>Panel B: Percentage of Black Residents</i>																
1980	-0.005*	(0.003)	5,521	0.822	-0.005*	(0.003)	5,731	0.820	-0.005*	(0.003)	5,848	0.818	-0.005*	(0.003)	5,303	0.784
1990	-0.002	(0.003)	5,661	0.826	-0.003	(0.003)	5,873	0.823	-0.003	(0.003)	5,979	0.823	-0.0008	(0.003)	5,446	0.783
2000	-0.003	(0.004)	5,547	0.760	-0.004	(0.004)	5,751	0.759	-0.004	(0.004)	5,851	0.757	-0.002	(0.004)	5,334	0.660
2010	-0.004	(0.006)	5,437	0.606	-0.003	(0.006)	5,634	0.596	-0.003	(0.006)	5,730	0.596	-0.005	(0.006)	5,226	0.529
2020	-0.016***	(0.005)	4,954	0.587	-0.017***	(0.005)	5,153	0.584	-0.017***	(0.005)	5,245	0.582	-0.015***	(0.005)	4,754	0.554
<i>Panel C: Percentage of Other Minority Residents</i>																
1980	-0.001	(0.003)	5,521	0.265	-0.0008	(0.003)	5,731	0.259	-0.001	(0.003)	5,848	0.256	-0.0008	(0.004)	5,303	0.260
1990	-0.003	(0.004)	5,661	0.296	-0.003	(0.003)	5,873	0.293	-0.004	(0.003)	5,979	0.289	-0.006*	(0.004)	5,446	0.241
2000	-0.004	(0.005)	5,547	0.421	-0.006	(0.005)	5,751	0.420	-0.007	(0.005)	5,851	0.418	-0.006	(0.005)	5,334	0.363
2010	-0.015**	(0.006)	5,437	0.415	-0.017***	(0.006)	5,634	0.412	-0.017***	(0.006)	5,730	0.411	-0.014**	(0.006)	5,226	0.380
2020	-0.004	(0.009)	4,954	0.372	-0.004	(0.009)	5,153	0.370	-0.003	(0.009)	5,245	0.372	-0.001	(0.010)	4,754	0.338
<i>Panel D: Percentage of White Owner-Occupied Housing Units</i>																
1980	0.021*	(0.013)	4,118	0.546	0.024*	(0.013)	4,264	0.542	0.025*	(0.013)	4,352	0.539	0.023*	(0.014)	3,958	0.600
1990	0.018	(0.013)	5,661	0.522	0.019	(0.012)	5,873	0.518	0.021*	(0.012)	5,979	0.516	0.009	(0.014)	5,446	0.546
2000	0.019	(0.012)	5,544	0.558	0.020*	(0.012)	5,748	0.555	0.021*	(0.012)	5,848	0.553	0.023*	(0.014)	5,331	0.542
2010	0.023*	(0.012)	5,436	0.512	0.024**	(0.012)	5,633	0.508	0.025**	(0.012)	5,729	0.506	0.023*	(0.013)	5,225	0.498
<i>Panel E: Percentage of Black Owner-Occupied Housing Units</i>																
1980	0.0002	(0.004)	4,118	0.703	-0.0001	(0.004)	4,264	0.696	-0.0000	(0.004)	4,352	0.690	-0.002	(0.004)	3,958	0.678
1990	-0.0003	(0.002)	5,661	0.714	-0.001	(0.002)	5,873	0.713	-0.0009	(0.002)	5,979	0.712	-0.0006	(0.002)	5,446	0.665
2000	0.002	(0.003)	5,544	0.720	0.001	(0.003)	5,748	0.719	0.002	(0.003)	5,848	0.718	-0.0003	(0.002)	5,331	0.660
2010	-0.001	(0.004)	5,436	0.453	-0.0001	(0.004)	5,633	0.440	0.0003	(0.004)	5,729	0.440	-0.003	(0.004)	5,225	0.394
<i>Panel F: Percentage of Other Minority Owner-Occupied Housing Units</i>																
1980	0.0003	(0.0002)	4,118	0.276	0.0003	(0.0002)	4,264	0.276	0.0003	(0.0002)	4,352	0.276	0.0003	(0.0002)	3,958	0.314
1990	-0.003	(0.002)	5,661	0.067	-0.003	(0.002)	5,873	0.065	-0.003*	(0.002)	5,979	0.064	-0.002	(0.002)	5,446	0.066
2000	0.0002	(0.004)	5,544	0.209	-0.0005	(0.003)	5,748	0.209	-0.0010	(0.003)	5,848	0.207	-0.0006	(0.004)	5,331	0.180
2010	-0.005	(0.004)	5,436	0.217	-0.006*	(0.004)	5,633	0.218	-0.007*	(0.004)	5,729	0.217	-0.005	(0.004)	5,225	0.206

Note: This table is plots parameter estimates α_1 from Equation 1. In Panels A–C, the dependent variables are the percentage of residents by race over time. In Panels D–F, the dependent variables are the percentage of owner-occupied housing units. Standard errors are clustered at the census tract level. Column Groups I, II, and III restrict to neighborhoods where at least 50% of the census block was built between 1940 and 1960 and had different coverage of racial covenants ($c_{jt} \leq 10, 25, 35$, respectively). Column Group IV restricts neighborhoods to $c_{jt} = 0$ but uses entropy balancing to match this placebo sample to the baseline sample on population, share of population over 18, and share of the population with more than a high school diploma at the census block group level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C.8: Racial Segregation 2020–2020: Controlling for House Values

	(I) Baseline Sample				(II) + Control for House Values at Block Group Level				(III) + Control for Sales Prices at Block Level			
	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²	α_1	s.e.	N	R ²
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Panel A: Percentage of White Residents</i>												
2000	0.034***	(0.012)	795	0.330	0.033***	(0.012)	795	0.331	–	–	–	–
2010	0.043**	(0.019)	791	0.416	0.040**	(0.019)	791	0.419	0.041**	(0.020)	788	0.415
2020	0.038*	(0.020)	731	0.428	0.036*	(0.020)	731	0.430	0.038**	(0.018)	729	0.444
<i>Panel B: Percentage of Black Residents</i>												
2000	-0.018***	(0.006)	795	0.308	-0.018***	(0.007)	795	0.309	–	–	–	–
2010	-0.017*	(0.010)	791	0.325	-0.015	(0.010)	791	0.328	-0.012	(0.011)	788	0.328
2020	-0.005	(0.013)	731	0.327	-0.005	(0.013)	731	0.327	-0.003	(0.012)	729	0.331
<i>Panel C: Percentage of Other Minority Residents</i>												
2000	-0.016	(0.010)	795	0.205	-0.015	(0.010)	795	0.206	–	–	–	–
2010	-0.026*	(0.014)	791	0.323	-0.025*	(0.014)	791	0.324	-0.029**	(0.014)	788	0.326
2020	-0.033*	(0.018)	731	0.341	-0.031*	(0.018)	731	0.343	-0.035**	(0.017)	729	0.349
<i>Panel D: Percentage of White Owner-Occupied Housing Units</i>												
2000	0.064***	(0.019)	795	0.273	0.061***	(0.019)	795	0.275	–	–	–	–
2010	0.074***	(0.025)	791	0.346	0.068***	(0.024)	791	0.350	0.073***	(0.025)	788	0.339
<i>Panel E: Percentage of Black Owner-Occupied Housing Units</i>												
2000	-0.010**	(0.005)	795	0.277	-0.010**	(0.005)	795	0.277	–	–	–	–
2010	-0.007	(0.006)	791	0.202	-0.007	(0.006)	791	0.203	-0.007	(0.006)	788	0.206
<i>Panel F: Percentage of Other Minority Owner-Occupied Housing Units</i>												
2000	-0.013**	(0.006)	795	0.149	-0.014**	(0.006)	795	0.149	–	–	–	–
2010	-0.014*	(0.008)	791	0.196	-0.014*	(0.008)	791	0.197	-0.014*	(0.008)	788	0.196

Notes: This table displays the parameter estimate α_1 from Equation 1 for 2000–2020. Column Group I shows the baseline results from Table 3. Column Group II additionally controls for house values at census block group levels. The 1980 census did not collect this data, while block group–level house values for 1990 are not included, as 39% of the sample has missing values. Column Group III controls for sales prices at block level in the baseline model by taking the house-level sales price mean at the block level for 2010 and 2020. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C.9: Racial Segregation 1980–2020 and Long-Run House Value Effects: Placebo Time Periods

Samples/ Models	1920–30–40			1927–35–47			1928–36–48			1945–54–64			1949–57–69			1950–58–70			1951–59–71			1952–60–72		
	α_1	s.e.	N	α_1	s.e.	N	α_1	s.e.	N	α_1	s.e.	N	α_1	s.e.	N	α_1	s.e.	N	α_1	s.e.	N	α_1	s.e.	N
<i>Panel A: Percentage of White Residents</i>																								
1980	0.013	(0.010)	451	-0.006	(0.008)	588	-0.006	(0.007)	655	0.011	(0.016)	711	0.002	(0.020)	561	-0.002	(0.018)	534	-0.005	(0.006)	530	-0.002	(0.008)	479
1990	0.000	(0.012)	447	-0.002	(0.010)	578	0.001	(0.012)	645	0.008	(0.011)	708	0.012	(0.022)	549	0.039	(0.032)	523	-0.004	(0.011)	525	-0.011	(0.009)	465
2000	-0.018	(0.016)	413	-0.016	(0.019)	538	-0.010	(0.018)	603	0.051	(0.037)	663	-0.093	(0.060)	503	-0.003	(0.063)	476	0.010	(0.020)	472	0.000	(0.019)	412
2010	0.001	(0.027)	374	-0.002	(0.025)	512	0.008	(0.027)	579	0.034	(0.039)	642	-0.030	(0.067)	480	-0.031	(0.089)	450	0.044	(0.028)	446	0.046	(0.029)	386
2020	-0.022	(0.037)	318	-0.020	(0.026)	435	-0.009	(0.033)	495	-0.015	(0.060)	564	-0.016	(0.057)	406	0.019	(0.082)	371	0.082	(0.056)	368	0.034	(0.052)	306
<i>Panel B: Percentage of Black Residents</i>																								
1980	-0.005	(0.007)	451	0.006	(0.006)	588	0.008	(0.006)	655	-0.007	(0.011)	711	-0.005	(0.010)	561	-0.000	(0.014)	534	-0.001	(0.004)	530	-0.003	(0.005)	479
1990	-0.001	(0.009)	447	0.000	(0.007)	578	-0.006	(0.009)	645	-0.007	(0.010)	708	-0.006	(0.020)	549	0.010	(0.024)	523	0.003	(0.009)	525	0.008*	(0.005)	465
2000	-0.000	(0.009)	413	0.007	(0.013)	538	0.005	(0.013)	603	-0.013	(0.016)	663	0.034	(0.031)	503	0.018	(0.033)	476	-0.003	(0.010)	472	0.005	(0.009)	412
2010	0.008	(0.014)	374	-0.001	(0.012)	512	-0.002	(0.015)	579	-0.026	(0.029)	642	0.050	(0.052)	480	-0.006	(0.036)	450	-0.021	(0.016)	446	-0.018	(0.019)	386
2020	0.011	(0.024)	318	-0.011	(0.019)	435	-0.013	(0.019)	495	-0.035	(0.031)	564	0.070	(0.062)	406	0.021	(0.040)	371	-0.026	(0.029)	368	-0.002	(0.026)	306
<i>Panel C: Percentage of Other Minority Residents</i>																								
1980	-0.008	(0.005)	451	0.000	(0.006)	588	-0.002	(0.004)	655	-0.004	(0.009)	711	0.003	(0.015)	561	0.003	(0.013)	534	0.006	(0.006)	530	0.005	(0.005)	479
1990	0.001	(0.005)	447	0.002	(0.006)	578	0.005	(0.007)	645	-0.001	(0.008)	708	-0.006	(0.016)	549	-0.048***	(0.015)	523	0.001	(0.009)	525	0.002	(0.010)	465
2000	0.018	(0.013)	413	0.010	(0.013)	538	0.005	(0.014)	603	-0.038	(0.027)	663	0.059	(0.038)	503	-0.015	(0.056)	476	-0.008	(0.015)	472	-0.005	(0.015)	412
2010	-0.008	(0.023)	374	0.003	(0.024)	512	-0.006	(0.022)	579	-0.008	(0.024)	642	-0.019	(0.031)	480	0.037	(0.083)	450	-0.023	(0.018)	446	-0.028*	(0.016)	386
2020	0.011	(0.025)	318	0.031	(0.023)	435	0.022	(0.028)	495	0.049	(0.044)	564	-0.053	(0.059)	406	-0.040	(0.073)	371	-0.057	(0.037)	368	-0.032	(0.037)	306
<i>Panel D: Log Assessed Value (2019) & Log Sales Price (2010–2019)</i>																								
Log Ass. Value	-0.003***	(0.001)	3876	-0.000	(0.001)	5301	0.001	(0.000)	5801	-0.001	(0.001)	6994	0.001	(0.002)	1336	-0.000	(0.001)	1169	0.000	(0.000)	3303	0.000	(0.000)	2511
Log Sales Price	-0.001	(0.002)	1391	0.001	(0.002)	2033	0.001	(0.001)	2228	-0.002	(0.001)	2838	0.000	(0.004)	520	-0.001	(0.003)	468	0.000	(0.001)	1291	-0.001	(0.001)	975

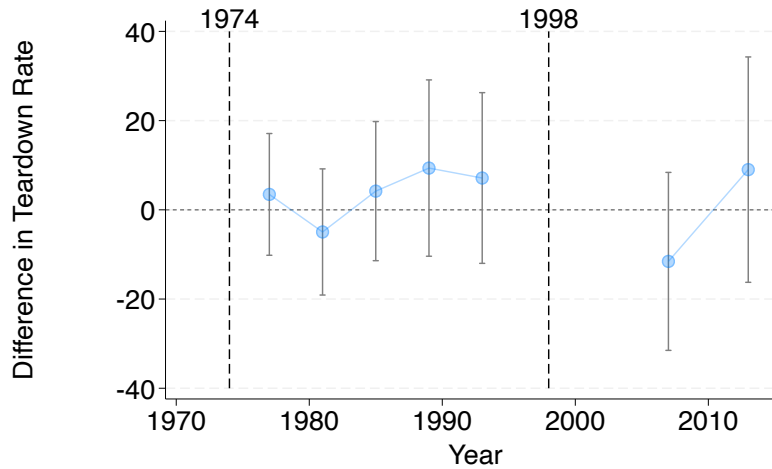
Notes: This table plots the parameter α_1 (column 1) from Equation 1 in Panels A–C and Equation 2 in Panel D. In Panels A–C, the dependent variables are the percentage of residents by race over time, and standard errors are clustered at census tract level. In Panel D, the dependent variables are log assessed (Ass.) value (2019) and log sales price (2010–2019), and standard errors are clustered at census block level. The table presents placebo tests simulating alternative years of the *Shelley* decision. The placebo periods are 1920–1940 (with 1930 as the year of the *Shelley* decision), 1927–1947 (1935, respectively), 1928–1948 (1936), 1945–1964 (1954), 1949–1969 (1957), 1950–1970 (1958), 1951–1971 (1959), and 1952–1972 (1960). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table C.10: Public Official Responses: Robustness

Dependent Variable	α_1	s.e. (cluster)	s.e. (robust)	N	R^2	Effect of 1 SD increase	Mean of Dep. Variable
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dist. Highways: 1940–1956 (m)	1.588***	(0.543)	[0.415]	687	0.965	53.75	1,043
Share Single-Family (Time to Housing Start)	0.023	(0.029)	[0.017]	732	0.961	–	71.06
Min. Lot Size (sq ft) (Time to Housing Start)	0.802	(1.055)	[2.459]	725	0.859	–	7,926
<i>Falsification:</i>							
Dist. Lakes & Parkways (m) (Time to Housing Start)	-0.545	(0.502)	[0.372]	732	0.841	–	1,007

Note: This table plots the parameter α_1 (column 1) from Equation 1. Row 1 shows the effect on the Euclidean distance to highways for the smaller 1940–1956 time window. Rows 2–4 use $(\%start \leq 1948)_{jt}$ and *time to housing start* as a control. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure C.3: Property Teardown Rate (1974–2013)



Note: This figure illustrates the difference in the teardown rates for houses built between 1940 and 1949 and between 1950 and 1959 based on two samples of houses from the American Housing Survey. The first sample was drawn in 1974 and was used in the surveys conducted in 1977, 1981, 1985, 1989, and 1993. The second sample was drawn in 1998 and was used in the surveys conducted in 2007 and 2013. The vertical bars represent 90% confidence intervals for the difference in teardown rates.

C.1 Alternative Empirical Design

The baseline empirical design restricts attention to majority-covenanted neighborhoods (to control for the endogenous choice to covenant) and uses the 1948 ruling and 1940–1960 timeline to construct the treatment intensity. An alternative empirical design could instead compare covenanted houses and neighborhoods built by 1948 with covenanted houses and neighborhoods built after 1948 and uncovenanted houses and neighborhoods built

between 1940 and 1960. To implement this alternative design, we use an instrumental variable (IV) approach and the 1948 *Shelley* ruling.

C.1.1 Neighborhood- and House-Level Models

$$Y_{jt} = \theta_0 + \theta_1(\% \text{enforceable cov})_{jt} + \theta_2(\text{mean time to build})_{jt} + \theta_4 X_{jt} + \eta_{k(j)t} + \epsilon_{1jt} \quad (\text{C.1})$$

$$(\% \text{enforceable cov})_{jt} = \gamma_0 + \gamma_1(\% \text{built} \leq 1948)_{jt} + \eta_{k(j)t} + \epsilon_{2jt} \quad (\text{C.2})$$

In Equation C.1, Y_{jt} is the percentage of residents or owner-occupied housing units by race in block j . We then define a new term $(\% \text{enforceable cov})_{jt}$, the percentage of houses with an enforceable racial covenant (i.e., the covenant was placed on the house by 1948 and the house was built by 1948), out of all houses built between 1940 to 1960 in neighborhood j at year t . We instrument $(\% \text{enforceable cov})_{jt}$ with the $(\% \text{built} \leq 1948)_{jt}$ in the first-stage Equation C.2. As with the baseline empirical design, we restrict this sample to neighborhoods where at least 50% of the houses were built between 1940 and 1960. To maintain comparability with the baseline design, we include controls for $(\text{mean time to build})_{jt}$ and housing characteristics (X_{jt}) and tract-year fixed effects, $\eta_{k(j)t}$.

We estimate outcomes at the house level with the same IV framework:

$$\log Y_{ijt} = \theta_0 + \theta_1(\% \text{enforceable cov})_{jt} + \theta_2(\text{mean time to build})_{jt} + \eta_{k(j)t} + \delta_t + \epsilon_{1ijt} \quad (\text{C.3})$$

$$(\% \text{enforceable cov})_{jt} = \gamma_0 + \gamma_1(\% \text{built} \leq 1948)_{jt} + \eta_{k(j)t} + \epsilon_{2ijt} \quad (\text{C.4})$$

In Equation C.3, Y_{ijt} is the log of the assessed value or sale price, as in our baseline house-level models. Again, we restrict this sample to neighborhoods where at least 50% of the houses were built between 1940 and 1960, control for $(\text{mean time to build})_{jt}$, and include tract-year fixed effects, $\eta_{k(j)t}$, and sale year fixed effects, δ_t , when applicable.

Under this design, $(\% \text{built} \leq 1948)_{jt}$ must satisfy both the exclusion restriction and the relevance condition. Regarding the former, for the neighborhood-level model, we assume that residents of different races do not systematically differ in their preferences for homes built before versus after 1948 (e.g., that White residents preferred homes built from 1940

Table C.11: Long-Run Racial Segregation & House Value Effects: Alternative Empirical Design

	θ_1	s.e. (cluster)	N	R ²	Effect of 1 SD increase	Mean of Dep. Variable	First-Stage F-Stat
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A Dependent Variable: Percentage of White Residents</i>							
1980	0.035**	(0.017)	6845	-0.002	0.57	96.06	59.05
1990	0.047**	(0.020)	6977	0.006	0.75	93.35	59.38
2000	0.093***	(0.029)	6811	0.009	1.49	86.63	62.12
2010	0.162***	(0.036)	6682	0.014	2.56	81.25	58.46
2020	0.140***	(0.042)	6126	0.011	2.26	70.84	62.36
<i>Panel B Dependent Variable: Percentage of Black Residents</i>							
1980	-0.023*	(0.012)	6845	-0.004	-0.37	2.02	59.05
1990	-0.016	(0.014)	6977	0.005	–	3.46	59.38
2000	-0.038**	(0.018)	6811	0.009	-0.61	5.54	62.12
2010	-0.044*	(0.026)	6682	0.019	-0.70	7.55	58.46
2020	-0.086***	(0.023)	6126	0.016	-1.39	8.70	62.36
<i>Panel C Dependent Variable: Percentage of Other Minority Residents</i>							
1980	-0.012	(0.012)	6845	0.002	–	1.92	59.05
1990	-0.031*	(0.016)	6977	0.002	-0.50	3.19	59.38
2000	-0.055**	(0.023)	6811	0.002	-0.87	7.82	62.12
2010	-0.118***	(0.027)	6682	-0.002	-1.86	11.20	58.46
2020	-0.054	(0.038)	6126	0.012	–	20.46	62.36
<i>Panel D Dependent Variable: Percentage of White Owner-Occupied Housing Units</i>							
1980	0.128**	(0.055)	5136	0.111	2.15	84.63	61.44
1990	0.152**	(0.059)	6977	0.102	2.42	82.08	59.38
2000	0.168***	(0.054)	6808	0.083	2.67	80.64	62.28
2010	0.194***	(0.058)	6681	0.069	3.06	75.81	58.47
<i>Panel E Dependent Variable: Percentage of Black Owner-Occupied Housing Units</i>							
1980	0.006	(0.015)	5136	0.005	–	0.79	61.44
1990	-0.005	(0.008)	6977	0.005	–	1.49	59.38
2000	-0.003	(0.014)	6808	0.006	–	2.73	62.28
2010	-0.013	(0.017)	6681	0.002	–	2.80	58.47
<i>Panel F Dependent Variable: Percentage of Other Minority Owner-Occupied Housing Units</i>							
1990	-0.022***	(0.008)	6977	0.001	-0.35	1.29	59.38
2000	-0.023	(0.016)	6808	0.005	–	3.29	62.28
2010	-0.051***	(0.017)	6681	0.002	-0.80	4.59	58.47
<i>Panel G Dependent Variables: Log Assessed Value (2019) & Log Sales Price (2010–2019)</i>							
Log Assessed Value (2019)	0.001**	(0.0003)	64784	0.002	1.54	–	422.38
Log Sales Price [2010-2019]	0.002***	(0.001)	26311	-0.001	3.93	–	371.91

Notes: This table displays the parameter θ_1 (column 1) from Equations C.1 and C.3. The dependent variables are resident percentages by race (Panels A–C), percentages of owner-occupied housing units by race (Panels D–F), and log assessed value (2019) and log sales price (2010–2019) in Panel G. Standard errors clustered at census tract level are in parentheses (column 2). Column 5 is the effect of a 1-standard-deviation (SD) increase in treatment in Equations C.1 and C.3 for statistically significant variables. Column 6 shows means of the dependent variables. Column 7 shows the first-stage F-stat. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

to 1948 but minority residents preferred homes from 1949 to 1960). We find it reasonable to believe that race does not correlate with preferences for homes within the 1940–1960 construction window. For the house-level model, the price of a specific house must not depend on the proportion of neighborhood construction completed before 1948, which is a harder assumption to defend. For the relevance condition to hold for both models, there must be a correlation between the percentage of houses in a neighborhood with enforceable covenants and those built before 1948. This is, of course, mechanically true, as—without considering *time to build*—if every house were built after 1948, then very few covenants would ever have been placed on the newly constructed houses, and none would have ever been enforceable. The time between the covenant being placed on a property and the end of construction, however, adds some variability. Regardless, as seen in Figure 2, if the home was built before 1948, it was likelier to be subject to a covenant, which, given the timing of *Shelley*, would have been enforceable. Moreover, the first-stage *F*-stat for both models is well above 50 (Table C.11, column 7).

The results from Equation C.1, presented in Table C.11, suggest that a 1 SD increase in the percentage of houses with an enforceable covenant in a neighborhood is associated with a 0.6–2.6 pp increase in the percentage of White residents. For Black or other minority residents, we see a negative relationship between enforceable covenants and the percentage of residents. These results align with our baseline estimates. Panels D, E, and F on ownership reflect similar findings. The results of the household-level model are presented in Table C.11 Panel G. The effects on assessed values and sales prices remain consistent with those of the baseline model; however, the impact of enforceability on assessed values is slightly smaller than the baseline.

In summary, we believe this empirical design does not adequately control for unobserved differences between neighborhoods with and without enforceable covenants. Nevertheless, we find effects mostly similar to baseline with this design, which we offer as additional suggestive evidence for the effect of the loss of racial covenant enforceability.

C.2 Relative Role of Early Responses in Persistent Effects

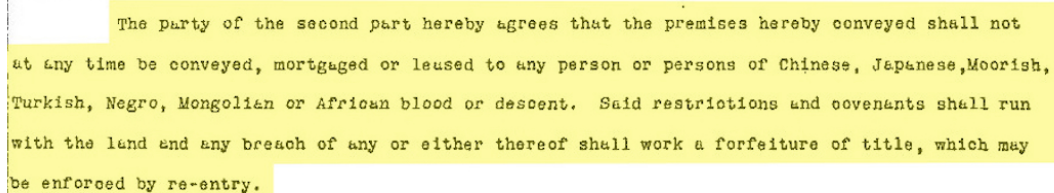
To evaluate the relative contribution of early responses to the baseline persistent effects, we use a hedonic house price model. Because all the early-stage responses of developers, initial

residents, and public officials are capitalized into house values, the hedonic model helps disentangle the relative roles of each. Each of these early-stage responses is an intermediate mechanism, so these results are suggestive rather than causal.

When we control for housing unit characteristics (log lot size and building size, number of bedrooms, bathrooms and floors, and indicators for house remodeling and property type), α_1 decreases by 18.1% and 22.9% for assessed value and sales prices, respectively, from the baseline total effect parameter (Appendix Table C.3 Panel A). When we additionally control for local public amenities (Euclidean distance to highways, minimum lot size, and share of neighborhood zoned for single-family), the estimate falls by 26.2% and 23.1% for assessed value and sales prices, respectively, from the baseline total effect parameter (Appendix Table C.3 Panel B). Thus, the historical differences in the characteristics of the constructed housing and local public amenities resulting from different levels of covenant enforceability potentially account for 23–26% of the persistent effects observed today. The remaining 74–77% of these effects may be attributed to two factors. First, unobservable differences in housing characteristics and local public amenities impacted by the *Shelley* ruling across treatment could drive some of these remaining effects. Second, factors such as racial segregation and racial attitude differences across space might play a role in driving the remainder of the persistent effects.

D. Additional Figures and Tables

Figure D.1: Advertisement of Racial Covenants



The party of the second part hereby agrees that the premises hereby conveyed shall not at any time be conveyed, mortgaged or leased to any person or persons of Chinese, Japanese, Moorish, Turkish, Negro, Mongolian or African blood or descent. Said restrictions and covenants shall run with the land and any breach of any or either thereof shall work a forfeiture of title, which may be enforced by re-entry.

Note: This figure provides an example of advertisement of racial covenants in a development.

Table D.1: Selected Legal Cases Regarding Racial Covenants in the US

Case	Year	State	Level*	Description
<i>Gandolfo v. Hartman</i>	1892	CA	District National	Covenant restricting Chinese from owning properties. The court invalidated the use of racial covenants, but this decision was largely ignored, because it did not align with existing interpretations of the Fourteenth Amendment.
<i>Queensborough Land Co. v. Cazeaux</i>	1915	LA	State	Covenant against property purchase by African American individuals. Neighborhoods started the suit, and resolution was in line with the covenant.
<i>Koehler v. Rowand</i>	1918	MO	County State	African American family (the Rowands) acquired a property under racial covenant. Plaintiffs demanded the property back; judge ordered the Rowands to return it.
<i>Los Angeles Investment Co. v. Gary</i>	1919	CA	County State	Defendant, African American, bought a property, which until 1930 could not be owned by a non-Caucasian. Plaintiff, a real estate company, sued. The resolution was against the defendant.
<i>Parmalee v. Morris</i>	1922	MI	State	The Morrisses, an African American couple, entered into a contract to purchase a lot. Neighbors made use of a covenant to impede operation. The circuit ruled against the Morrisses.
<i>Janss Investment Co. v. Walden</i>	1925	CA	County State	Walden broke a covenant from Janss Investment Company, conveying his property to a black woman, Betty Willing. The company sued Walden. The Superior Court of Los Angeles County rendered in favor of the plaintiff. The defendant Walden appealed to the Supreme Court of California. The court maintained the original decision.
<i>Corrigan v. Buckley</i>	1926	DC ⁺	District National	Corrigan broke a covenant, selling her land to a Black couple. Buckley sued, and the Court of the District ruled in his favor. Corrigan appealed; the US Supreme Court maintained the decision.
<i>Burke v. Kleiman</i>	1934	IL	State	Burke leased a covenanted apartment to Hall, a African American man. Kleiman sued. First sentence was favorable to Kleiman. Burke appealed, alleging that since the agreement was signed (1927) conditions had changed in the area. The court affirmed the first sentence.
<i>Grady v. Garland</i>	1937	DC ⁺	District	Group of properties in DC had a racial covenant. Plaintiff Grady, owner of a lot, brought suit on behalf of himself and other owners and parties interested in other lots to eliminate the deed. Judge ruled against the plaintiff.
<i>Meade v. Dennistone</i>	1938	MD	State	A property subject to a racial covenant was sold to Edward Meade, an African American, for \$150 in cash, with the balance to be paid in monthly installments. Due to the covenant, Meade required the deposit to be refunded. Court verdict was favorable to Dennistone.
<i>Hanberry v. Lee</i>	1940	IL	State National	Homeowner who had signed a restrictive covenant sold his home to Hansberry, an African American. Lee sought to enforce the covenant and void the sale. Illinois courts held that the seller could not sell to Hansberry. The US Supreme Court reversed, holding that the state courts' application of <i>res judicata</i> violated the due process clause of the 14th amendment.
<i>Moore v. Adams</i>	1940	AR	State	A covenant stated that once the lot was sold, the constructed property should not have a value lower than \$3,400 and could not be conveyed to people of "negro blood". Lot was conveyed to Moore, who proposed to erect a tourist camp of a value greater than \$4,000. Suit was filed by Adams, who had purchased lots in the same subdivision, to restrain Moore's construction. Court found in favor of Adams.

Note: *Some cases started at a given level (county or state) and ended at a higher level (state or national); ⁺ District of Columbia.

Table D.1: Selected Legal Cases Regarding Racial Covenants in the US (Continued)

Case	Year	State	Level*	Description
<i>Lyons v. Wallen</i>	1942	OK	State	Property under racial covenant was intended to be sold to Lyons, an African American. Wallen sued to impede the transaction. Decision was favorable to Wallen. Lyons appealed with no success.
<i>Doherty v. Rice</i>	1942	WI	State	Courts upheld restrictions excluding certain races from use or occupancy as valid and not fettering alienation.
<i>Fairchild v. Raines</i>	1944	CA	State	The Winsells sold a property under racial covenant to the Raines (African Americans). Fairchild, signer of the covenant back in 1921, sued Raines. In the first instance, the court prohibited the Raines from using the property. The defendants appealed, and the previous sentence was reversed.
<i>Mays v. Burgess</i>	1945	DC [†]	District	Mays, an African American, bought a racially restricted property from Jane Cook. In trial, the District Court stated that the covenant remained valid. Mays appealed the sentence with no success.
<i>Scholtes v. McColgan</i>	1945	MD	State	Suit by Scholtes to restrain McColgan from selling any part of a tract of land to any African American person. The complaint was dismissed, and the plaintiff appealed. On appeal, the racial covenant was affirmed.
<i>Phillips v. Wearn</i>	1946	NY	County	Philips and Wearn become owners of two covenanted parcels of land in Westchester County. However, the defendant considered herself an octoroon (person having 1/8 African American blood). The court ruled favorably to the plaintiff.
<i>Vernon v. R. J. Reynolds Realty Co.</i>	1946	NC	State	The court refused to cancel a racial restriction despite the surrounding area being occupied by Black and White residents unwilling to buy the property, holding the restriction protected the restricted area itself.
<i>Bogan v. Saunders</i>	1947	DC [†]	District	Saunders (African American) bought a covenanted property. The plaintiffs sought to enforce the covenant and void the sale. The ruling was for Bogan.
<i>Hurd v. Hodge</i>	1947	DC [†]	District	The Hodges sued broker Raphael Urciolo and the new owners of a sold property, the Hurds, for violating a racial covenant. DC courts upheld the covenant, but the US Supreme Court agreed to hear the case as a companion to <i>Shelley vs Kramerer</i> . DC is not a state and is not subject to the 14th amendment; hence, the ruling was based on the Civil Rights Act of 1866, which requires the federal government to treat citizens equally.
<i>Meckler v. Baugh</i>	1947	DC [†]	District	Baugh, an African American, signed a contract for a property from Meckler. A day after the contract was signed, the agent presented Baugh with a new contract including a racial covenant. Baugh decided not to buy the house under these conditions and demanded a refund of the deposit paid. The resolution was favorable to Meckler.
<i>Northwest Civic Ass'n v. Sheldon</i>	1947	MI	County State	Subdivision of 338 lots, of which 310 were subject to a racial covenant. The Sheldons purchased one of the lots outside the covenant. As disclosed by the testimony, Otis Sheldon was the only defendant who was not Caucasian. The court considered that Sheldon was told about the covenant when purchasing the property. Decree was modified such that Sheldon could enter the property but not inhabit it.
<i>Sipes v. McGhee</i>	1947	MI	State National	McGhees purchased a house in a covenanted neighborhood. The neighborhood association went to court to have them removed, and the court, upholding the covenant, ordered the McGhees to leave the property. The Michigan Supreme Court affirmed that decision. The case went to the US Supreme Court, where the ruling was reversed.

Note: *Some cases started at a given level (county or state) and ended at a higher level (state or national); [†] District of Columbia.

Table D.1: Selected Legal Cases Regarding Racial Covenants in the US (Continued)

Case	Year	State	Level*	Description
<i>Claremont Improvement Club v. Buckingham</i>	1948	CA	State	Plaintiffs sued to enforce a racial covenant to forfeit the sale of a lot occupied by defendants and to restrain their continued residence. Defendants alleged that the expression excluding those not of “pure Caucasian blood” was incapable of exact determination. Ruling went for plaintiffs.
<i>Goetz v. Smith</i>	1948	MD	State	Wanda Goetz and Charles Bell sued Hiram Smith and Lulu Smith, aiming to impede them from occupying a racially restricted property. The ruling was favorable to the Smiths.
<i>Ralph v. Trawick</i>	1948	DC [†]	District	Ralph, an African American, entered into a contract for the purchase of real estate. Before the contract was consummated, he learned the property was subject to a covenant. He then refused to complete the purchase and sued the broker for the deposit paid. Ruling was favorable to Ralph.
<i>Shelley v. Kraemer</i>	1948	MO	County State National	The Shelleys moved into a neighborhood without knowing about a covenant against African and Asian Americans. Kraemer brought suit to enforce the covenant, supported by other members of the neighborhood. The Supreme Court consolidated that the enforcement of the racial covenants in state court violated the equal protection clause of the 14th amendment.
<i>Tovey v. Levy</i>	1948	IL	State	In 1944, a racially covenanted parcel was conveyed to Hayman Levy, who signed a deed to convey it to Cadillac Hotel Corporation, Inc, which leased the property to Joseph Allen, an African American. The amended complaint alleged that occupancy by Allen was breached the covenants. Ruling favorable for Levy.
<i>Weiss v. Leason</i>	1949	MO	State	The Leasons sold or were about to sell their lot to the Streets, African Americans. The lots in Santa Fe were subject to a racial covenant. Under the decision of the US Supreme Court in <i>Shelley v. Kraemer</i> , the trial court dismissed the action.
<i>Amschler v. Remijas</i>	1950	DC [†]	State	The Amschlers filed a complaint seeking to restrain the defendants from selling to African Americans. Ruling was favorable to plaintiffs, with the defendants being obligated to leave the property in 1947. By decision in previous cases, the US Supreme Court made racial covenants unenforceable. On May 24, 1948, the defendants moved for dissolution of the injunction and presented their suggestion of damages.
<i>Correll v. Earley</i>	1951	OK	State	Correll sued to enforce covenants in an agreement by property owners restricting against alienation to African Americans and for damages as a result of a conspiracy to injure the value of the plaintiffs’ property. In the first instance, the case was decided against the plaintiff, who appealed; the sentence was reversed.
<i>Barrows v. Jackson</i>	1953	CA	State	A covenant restricted the use and occupancy of lands to only Caucasian persons, obligating the signers to incorporate this restriction in all transfers of the land. Jackson conveyed a parcel of her land to a non-Caucasian. Barrows and other landowners filed a lawsuit in California state court seeking to enforce the covenant and recover damages for Jackson’s breach of the covenant. The trial court relied on the holding in <i>Shelley v. Kraemer</i> and ruled in favor of Jackson.

Note: *Some cases started at a given level (county or state) and ended at a higher level (state or national); [†] District of Columbia.