# APPENDIX FOR COMPETITION AND CONSUMER DISCRIMINATION IN PUBLIC ACCOMMODATIONS

Last Updated: March 27, 2025

Maggie E.C. Jones  $Emory\ University\ \mathcal{E}\ NBER$ 

TREVON D. LOGAN The Ohio State University & NBER

David Rosé Wilfrid Laurier University

LISA D. COOK Michigan State & NBER

# Contents

$\mathbf{A}$	Add	ditional Discussion of the Green Books Dataset	<b>A</b> 3
В	Con B1 B2 B3	Additional African American Travel Guides Digitized for Analysis The Red Book Data	A9 A9 A11 A11
$\mathbf{C}$	Det	ails on Other Data Sources	A16
	C1 C2	Additional Sources	
D	Bin	ned Scatterplot Depiction of the Instruments	<b>A2</b> 0
${f E}$	Ada	ditional Results for Market Competition	<b>A23</b>
	E1	Overidentified Model	A23
	E2	Functional Form of Outcome and Treatment	A24
		E2.1 Levels	A24
		E2.2 Quantiles	A26
	E3	Excluding Counties With No Migrants	A28
	E4	Expanded Definition of the Market	
	E5	Robustness of Results to Alternatives for the Market Conditions Hypothesis	
		E5.1 Robustness in WWII IV Specification	
	$\Gamma G$	E5.2 Robustness in Black Migration IV Specification	
	E6	Selecting the Functional Form for Controls	
		E6.2 Including Controls in Levels	
${f F}$	$\mathbf{Adc}$	ditional Price Results	<b>A44</b>
	F1	Alternative Price Definitions and Functional Forms	A44
	F2	Bounding the Price Regressions	A46

## A Additional Discussion of the Green Books Dataset

There are at least three important considerations that relate to the use of the Green Books to measure non-discriminatory firms in an area. These include how one should interpret a change in the number of establishments; how well the Green Books capture the number of discriminatory firms in a region; and whether it is appropriate to use establishments that cater to tourists in an analysis of local shocks. On the first point, a change in the number of Green Book establishments could, in theory, reflect either supply-side or demand-side factors. On the supply side, an increase in the number of establishments could represent a more welcoming environment for African Americans. On the demand side, an increase in the number of establishments could be the result of a more hostile local environment, wherein there would be a greater demand for information on safe establishments. However, Cook et al. (2023) show that supply-side factors likely dominated, and thus we can interpret a change in the number of Green Book establishments as representing a more favorable climate for African Americans.

Regarding the representativeness of the Green Books, Cook et al. (2023) also provide an in-depth analysis of this point. They compare formal accommodations listed in the Green Books to two other sources of information on formal accommodations that served Black clientele from two different time periods. Their analysis reveals that the Green Books are at least as representative as other sources, if not more so. That being said, others have noted that the Green Books included only a subset of the total number of non-discriminatory establishments (Hall, 2023). Indeed, in the second part of our empirical analysis when we examine prices, we complement our analysis with several new sources of African American travel guides that generate additional listings beyond what is included in the Green Books. However, what is important for the use of the Green Books in our market competition analysis is that neither the Green Books nor the Censuses of Business became more or less selective over time in a way that is systematically correlated with unobservables.

Finally, there is the issue of using establishments that cater to tourists in an analysis that centers on local population shocks. In our empirical analysis, the consumer ratio is proxied by the county-level ratio of the Black to White populations. This leads to an important question regarding the relevance of the local county population as the appropriate consumer base for public accommodations in a given county. This is likely less of a concern for eating and drinking establishments, as well as gasoline stations, than it is for the hotel industry.

Existing literature has exploited the construction of new highway segments to proxy for demand shocks to hotels and motels (Mazzeo, 2002; Hubbard and Mazzeo, 2019). This strategy is less conducive to the time period in our analysis because there was very little

Table A.1: Contemporary Relationship between Number of Formal Accommodations and County Population

	(1)	(2)
log(population)	0.630***	0.674***
	(0.026)	(0.024)
Adjusted $R^2$	0.623	0.688
State F.E.		X
Clusters	49	49
Observations	2167	2167

Notes: The dependent variable in each column is the natural logarithm of the number of formal accommodations in a county. The 2018 population estimates comes from the U.S. Census Bureau's and the number of hotel and motel establishments come from the U.S. Census Bureau's County Business Patterns (2018). Standard errors clustered by state in parentheses. \* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01

major highway construction between 1940 and 1950 (Cook et al., 2023). Thus, we rely on the consumer ratio as a proxy for demand. When it comes to hotels, one way in which the local consumer ratio would proxy for the relevant consumer ratio is if the potential market sizes of both discriminatory and non-discriminatory establishments in a given county are proportional to the Black and White populations in said county. Evidence based on the contemporary relationship between county population and the size of the formal accommodation sector suggests that this is likely the case. In 2018, the raw correlation coefficient between population and number of hotel and motel establishments at the county level was 0.9055. Table A.1 presents estimates of the elasticity of the number of hotels and motels to county population, conditional on state fixed effects. The point estimate in column (2) indicates that a 1 percent increase in the population is associated with a 0.67 percent increase in formal lodgings. This is evidence that, in a setting where the entire accommodations market is non-discriminatory, the demand for hotels is proportional to the county population.

We suggest that this is likely to hold for the White and Black sub-markets during our period of study and historical survey data supports this notion. In the spring of 1958, the University of Michigan's Survey of Consumer Attitudes and Behavior asked a representative sample of American households questions about their travel intentions as well as demographic information that allows for a comparison across White and Black households. We generate a binary outcome variable that equals one if a household reported considering visiting their friends and family when planning a trip.<sup>2</sup> Column (1) in Table A.2 compares

<sup>&</sup>lt;sup>1</sup>Authors' calculation using the estimated county population in 2018 (U.S. Census Bureau, 2020b) and the establishment count of hotels and motels (U.S. Census Bureau, 2020a). More information on these sources is found in Section C1 of the Online Appendix.

<sup>&</sup>lt;sup>2</sup>See Appendix C for more detail on the specific survey questions and the creation of these binary variables.

Table A.2: Vacation Travel for Black and White Households

	(1)	(2)
	Travel to visit friend/family	Travel less than 200 miles
Black respondent	-0.0203	-0.0408
	(0.033)	(0.058)
Intercept	0.293***	0.284***
	(0.040)	(0.067)
Observations	1446	617
Clusters	83	81

Notes: The dependent variable in column (1) is an indicator variable for whether vacation travel would be for visiting a friend or family member and the dependent variable in column (2) is an indicator for whether someone planning a vacation would be traveling less than 200 miles from their residence. The specific questions used to formulate these variables can be found in the data section of Appendix C. Standard errors are clustered at the primary sampling unit (city/suburb). \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

the mean responses across Black and White households.<sup>3</sup> The coefficient estimate labelled "Black respondent" in the table captures the difference in means across the two groups. We do not find statistically significant evidence of differences across Black and White households in the likelihood of considering family and friends when planning trips. Roughly 30% of White and Black households report travelling to visit friends or family. The fact that we do not find racial differences in the propensity to travel for this reason suggests that the market size proportionality applies equally to both the Black and White tourism markets.<sup>4</sup>

Column (2) of Table A.2 also uses the University of Michigan Spring 1958 Survey of Consumer Attitudes and Behavior to construct an indicator for whether a household is planning to travel less than 200 miles on their trip. We regress this variable on an indicator for whether the respondent is Black, as well as state fixed effects. Again, roughly 30% of respondents said that they would be travelling a short distance on their upcoming trip and we do not find a statistically significant difference in how White and Black households responded to this question. Given that formal accommodations appear to be proportionally related to the local consumer market and that many people traveled relatively short distances, we also present our main results where we define the consumer ratio based on the own-county and neighboring-county populations.<sup>5</sup>

Overall, we view the issue of using the county population to proxy for the relevant market as less of a concern for eating and drinking establishments; however, the central role of formal accommodations both in our analysis and in the broader historical narrative

<sup>&</sup>lt;sup>3</sup>Formally, we estimate the regression equation  $y_i = \alpha + \beta \text{race}_i + \epsilon_i$ , where  $y_i$  is an outcome variable. In this case, it is an indicator for whether the respondent considers friends and family in planning trips.

<sup>&</sup>lt;sup>4</sup>This conjecture assumes that White travelers primarily travel to visit White friends and family, while Black travelers primarily travel to visit Black friends and family.

<sup>&</sup>lt;sup>5</sup>Using ArcGIS, we define county i's neighboring counties as all adjacent counties.

of the Civil Rights Movement warrants is discussed in greater detail throughout the main manuscript.

# B Constructing the Price Dataset

To construct the price dataset, we combined several data sources, including our Green Book data, numerous alternative Black travel guides, and a national directory of hotels, known as the Red Books. This section describes the additional data sources and the process we used to combine all of these datasets to obtain our final dataset on prices across discriminatory and non-discriminatory hotels. We begin by describing the additional Black travel guides, then we discuss the Red Book data, the process by which we matched the non-discriminatory establishments to the Red Books, and finally, how we constructed the main price variables.

## B1 Additional African American Travel Guides Digitized for Analysis

Travelguide: Founded in 1946 (New York Public Library, 2024), Travelguides were published annually until 1963 (Bay, 2021). They were initiated by William "Billy" Butler, who travelled with the Fletcher Henderson Orchestra and knew first hand of the difficulties African American musicians faced on the road (Sorin, 2020). Unlike many of the other guides that remained largely apolitical, Travelguide explicitly promoted integration. They sold for \$0.5-\$2 over the period of publication. We digitize the 1950 and 1962 editions of Travelguide, which we obtained from the New York Public Library's Digital Collection.

Go, Guide to Pleasant Motoring: Known colloquially as "the Go Guides", these travel guides were published annually from 1952-1959. They cost \$1 throughout the entire period of their publication. A recurrent issue faced by Black travellers was the variable quality of Black-friendly public accommodations and none of the existing travel guides to date included information pertaining to quality. As such, the Go Guides were developed to fill this void and largely focused on higher end facilities (Sorin, 2020). For instance, the Go Guides state that in some states hotel chains like Hilton, Radisson, and Sheraton-Biltmore were open for African American travellers, perhaps a sign of the gradual integration of these public accommodations. We digitize the 1952 and 1959 edition of the Go Guides, which we obtain from the New York Public Library's Digital Collection.

**Department of Interior Guides:** In 1937 Charles McDowell, an employee of the U.S. Travel Bureau, partnered with Victor Green to help him expand the Green Book publications (Bay, 2021). He supplied Green with listings from federal sources, like the collection of Black businesses compiled by the US Department of Commerce. In addition to assisting Green with expanding the Green Books, McDowell compiled these listings in a separate government report, published by the Department of the Interior, known as the *Directory of* 

Negro Hotels and Guest Houses. The Department of the Interior's guide was only published in two years and never posed much competition to the Green Books, as it was less comprehensive. We digitize the only years of the Department of the Interior guides, 1939 and 1941. We obtained the 1939 edition from Facebook: https://www.facebook.com/media/set/?set=a.10150307219500250.383891.150117595249 and we obtained the 1941 edition through the Russel Sage Foundation Library.

The Wisconsin Black Business Directory: The final guide that we use is a directory of Black-owned businesses from the state of Wisconsin in 1950-1951. This guide included Black-owned businesses of all types, including accountants, artists, carpenters, doctors, etc. A section on hotels that were "owned and operated for or by [Black] people" across the country was included at the end of this guide. The publication stated, "enjoy your vacation without humiliation". We obtained the 1950-1951 Wisconsin Black Business directory from the Wisconsin Historical Society and we use the list of hotels in our analysis here.<sup>6</sup>

We digitized each of the alternative guides and then conducted a manual review of the original transcription, at which point, we corrected a few initial transcription errors.

#### B2 The Red Book Data

We obtained three copies of the Red Book directories, corresponding roughly to 1940, 1950, and 1960. These were available on microfilm at the Yale University Library:

- "The official hotel red book and directory: 1940 edition 55th annual," issued June 5, published by the American Hotel Association Directory Corporation for the American Hotel Association of the United States and Canada, 221 West 57th Street, New York.
- "The official hotel red book and directory: 1949-1950 64th annual," issued annually in June, current to June 1950, published by the American Hotel Association Directory Corporation, 221 West 57th Street, New York.
- "1959 Hotel Red Book: Official Hotel Directory of A.H.A. Members," current through May 1960, issued annually in May by American Hotel Association Directory Corporation, 221 West 57th Street, New York.

We digitized each of these copies of the Red Books. The transcription included the full name of the hotel, the state, county, and city of the hotel, whether the hotel was a

<sup>&</sup>lt;sup>6</sup>Shadd, Mary Ellen. "Negro Business Directory of the State of Wisconsin." (Milwaukee, Wis.: M.E. Shadd, 1950); online facsimile at http://www.wisconsinhistory.org/turningpoints/search.asp?id=1254.

member of the American Hotel Association (in 1940 and 1950, the years for which this information is available), whether the hotel had an advertisement in the directory. When available, transcription also included the street address of the hotel, the number of rooms in the hotel, whether the hotel was open seasonally and, if so, the dates of operation, and, most importantly, the price(s) at the hotel. In 1940 and 1950 this included either a European plan, which did not include meals, or an American plan, which included all meals, or both. Some hotels listed a minimum and maximum price. In 1960, prices included any combination of a European plan, American plan, or Modified American plan (with breakfast and either lunch or dinner). As with 1940 and 1950, hotels could list a minimum and maximum price and in some cases, they listed separate prices for the summer and winter.

Before we linked the Red Books to the sources of non-discriminatory establishments, we conducted a manual review of the original transcription, which resulted in a few corrections for spelling errors.

### B3 Matching Non-Discriminatory Establishments to the Red Books

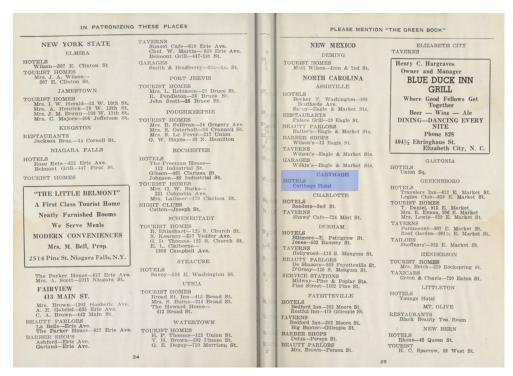
#### B3.1 Matching the Green Book Data

To construct the price dataset, we began by matching the Green Book establishments to the Red Books. We used the full set of Green Book establishments as a baseline dataset of non-discriminatory establishments. These data were first compiled by Cook et al. (2023), and include vacation rentals and advertisements, in order to maximize the number of matches. We restricted to the years that include census decades: 1940, 1950, 1960. We included formal and informal accommodations, though informal accommodations were rarely (if ever) matched to a Red Book establishment.

For each Green Book establishment X year, we find the set of Red Book establishments (if any) in the same year and county with close names, which we consider to be possible matches. For this matching exercise, we defined close names as establishment names with an optimal string alignment distance of no more than 6.7 We chose this value by trial and error. Prior to calculating the string distance, we removed common terms from establishment names such as "the", "hotel", "inn", etc. Then, we manually reviewed the set of possible matches to determine which were true matches.

Figure B.1 displays an example of one such match.

<sup>&</sup>lt;sup>7</sup>The "optimal string alignment" or OSA distance is a measure of similarity between two text strings. It is the minimum number of deletions, insertions, substitutions, or transpositions of adjacent characters needed to convert one string to the other.



(a) 1940 Green Book



(b) 1940 Red Book

Figure B.1: An example of a Green Book establishment that we match to the Red Book to obtain information on prices charged.

#### B3.2 Deduplicating the Alternative Guides Against the Green Books

Next, we matched the set of alternative guides to the Green Books to remove potential duplicate establishments. That is, if an establishment showed up in a particular year in the Green Books and the alternative guide, we only kept one copy of the establishment. To do this, we geocoded the location of each establishment using a combination of the U.S. Census Geocoder, Geocodio, and Here (online geocoding services).

After geocoding, we calculated, for each Green Book establishment, the five alternate travel guide establishments with the lowest "name-geographic distance" score, which we considered to be possible matches. We calculated the "name-geographic distance" score as follows:

$$dist_{ng} = \min(dist_g/10, 1)^2 + dist_n^2 + \min(dist_g/10, 1) \times dist_n$$
(A1)

Here  $dist_{ng}$  is the "name-geographic distance",  $dist_g$  is the geographic distance between the Green Book establishment and the Alternate Travel Guide establishment (in miles), and  $dist_n$  is the Jaro–Winkler string distance between the establishment names.<sup>8</sup>

Since we used three different geocoding services for the Alternate Travel Guide establishments, we use the minimum distance across the three services when calculating  $dist_g$ . As with the Red Books, prior to calculating the string distance, we remove common terms from establishment names such as "the", "hotel", "inn", etc. The functional form of the "name-geographic" distance was chosen by trial and error, but was designed to match establishments that are close in both name and geographic distance. Additionally, the score was designed to match only on name in cases where there were no matching hotels within 10 miles (which is likely the result of address transcription or geocoding errors).

As before, we manually reviewed the set of possible matches to determine which were true matches.

#### B3.3 Matching the Alternative Guides to the Red Books

After deduplicating the alternative guides against the Green Books, we matched them to the Red Books. For this process, we added city and county centroid coordinates to each Red Book establishment using NHGIS 1960 shape files. Then, for each alternate guide establishment, we found the ten Red Book establishments with the lowest "name-geographic distance" score, which we considered to be possible matches. We calculated this "name-

<sup>&</sup>lt;sup>8</sup>This process differs from the Red Book to Green Book match because these alternate travel guides generally lack a native county variable.

geographic distance" score as follows:

$$dist_{ng} = dist_g + dist_g^2 + dist_n + dist_n^2 + dist_g \times dist_n$$
(A2)

Here  $dist_n$  is the Jaro-Winkler string distance measure with the same common terms removed from establishment names as before.  $dist_g$  is calculated as follows:

- If the Red Book establishment has city coordinates and those coordinates are within 5 miles of the closest of the three alternate guide geocoded coordinates, we set  $dist_g = 0$ . If the closest is more than 30 miles away, we set  $dist_g = 1$ . For intermediate distance 5 < x < 30 we set  $dist_g = (x 5)/25$ .
- If the Red Book establishment lacks city coordinates, we repeat this process with county coordinates instead. Since counties are larger, we set  $dist_g = 0$  if the closest distance is within 15 miles,  $dist_g = 1$  if the closest distance is greater than 50 miles, and  $dist_g = (x 15)/35$  for intermediate distances.
- Again, the functional form of the "name-geographic" distance was chosen by trial and
  error, but it is designed to match establishments that are close in both name and
  geographic distance. Here, we use Red Book city and county for geographic distance
  since many Red Book establishments do not have a listed address.

We manually reviewed these possible matches to determine which are true matches.

#### B3.4 Descriptive Analysis of the Final Dataset

To construct our final dataset, we drop establishments that do not have any price data or that we cannot match to county population data from the Censuses of Population. In total, this yields 29,983 establishment×year observations. By far, European prices, which did not include meals, were the most common type of price listed. In total, 26,372 establishment×year observations included this type of price. Given that this price is the most intuitive, we use this as our primary price measure.

We construct one more composite price measure that we use as a robustness check. This measure uses the European minimum when available, and if no European minimum is listed, then it uses the American minimum, or, in the event that no American minimum exists, it uses the other prices included in the data. Dummies for plan type are included in these specifications.

We also generate variables for the number of rooms for hotels or motels, the number of apartments, the number of suites, and the number of cottages, as well as indicators for whether the establishment is a hotel or motel, the type of plan, and whether the establishment is accredited by the American Hotel Association. At the county level, we merge in

Census data on the share of the population that is Black and the population counts for the county in which the establishment is located. We also generate county-level counts of the total number of establishments, as a proxy for the competitiveness of the local market.

After deduplicating our alternative guides against the Green Books and applying our data transformations, we are left with a dataset on the prices of 588 Black-friendly, or non-discriminatory establishments, and 29,395 discriminatory establishments. These counts are constructed under the assumption that if we are unable to match a hotel from the Red Books to a Black-friendly travel guide, that hotel must be discriminatory.

Table B.1 provides a high-level summary of the matches that we found. After deduplicating, there were no remaining unique establishments from the Wisconsin Black Business Directory nor the Department of the Interior guides, thus the numbers in the table only include establishments from the Green Books, Go Guides, and Travelguides.<sup>9</sup>

Table B.1: Summary of Businesses in the Red Book Data

	1940	1950	1960
Total # Est	13,441	11,917	4,625
Discriminatory	13,432	11,716	4,247
Non-discriminatory	9	201	378
% Non-discriminatory	0.067	1.69	8.17

Note: This table displays summary statistics for the Red Book dataset. "Total # Est" is the total number of establishments for which there is price data available. "Discriminatory" is the number of businesses that are discriminatory (i.e., those that were not located in a Black-friendly travel guide), "Non-discriminatory" is the number of non-segregated (i.e., businesses that were located in a Black-friendly travel guide). "In Green Book" lists the number of establishments that were in the Green Book data, these may or may not be establishments that were also located in the Go Guides and the Travelguides. "Only Go Guide" lists the number of establishments that were only located in the Go Guides, whereas "Only Travelguides" lists the number of establishments that were only located in the Travelguides. "Go or Travel, not Green Book" lists the number of establishments that were located in both the Go Guides and the Travelguides but were not included in the Green Books.

In 1940, there were 13,441 establishments in the Red Book that included price data. We were only able to locate 9 establishments from the guides for African American travelers for this decade. By 1950, coverage of non-discirminatory establishments increased. In this year, 11,917 establishments included prices, and 201 establishments were non-discriminatory, in the sense that they were located in at least one of the travel guides. In the final wave of data in our price dataset, the ratio of discriminatory to non-discriminatory firms narrowed even further. In 1960, there were only 4,625 establishments in the Red Books with price

<sup>&</sup>lt;sup>9</sup>The Department of the Interior guides did not result in any new matches, either because the businesses listed in these guides were already listed in the Green Books or because the businesses listed in these guides that were not included in the Green Books were also not included in the Red Book.

data, likely a reflection of the fact that the Red Books became increasingly selective over time. Of these, 378 were located in at least one of the Black-friendly travel guides.

Next, Table B.2 presents a summary of the variables included in the price dataset. Column (1) displays discriminatory firms—those that were included in the Red Books but that we were not able to match to an African American travel guide—and column (2) displays non-discriminatory firms—those that were included in the Red Books and that we were able to match to an African American travel guide. The final column presents difference in means tests for column (1) - column (2).

There are several differences in the characteristics of discriminatory and non-discriminatory hotels. Notably, several metrics of "quality" seem to indicate that the non-discriminatory hotels that we were able to match to the Red Books tended to be of higher average quality than the discriminatory Red Book hotels. For example, non-discriminatory hotels were more likely to be accredited by the AHA, they were less likely to be missing data on the number of rooms, and tended to have more rooms, on average. They were also more likely to report the more conventional European price. Though, since this price does not include meals, it is not clear whether this is a metric of quality. We also see that non-discriminatory hotels are present in counties with larger populations, and a slightly lower share Black. Finally, both the European and composite prices are higher at non-discriminatory hotels, a result we examine in detail in the main text.

Table B.2: Summary Statistics for the Price Dataset, by Discriminatory Status

	Discriminatory (1)	Non-Discriminatory (2)	Difference (3)
Panel A: Prices		. ,	
European Price	2.25	4.70	-2.45***
	(1.79)	(2.60)	
Composite Price	2.73	4.85	-2.12***
•	(2.55)	(2.81)	
Panel B: Basic Controls			
Accredited by AHA	0.38	0.51	-0.14***
	(0.48)	(0.50)	
Hotel	0.81	0.81	-0.01
	(0.39)	(0.39)	
Motel	0.01	0.03	-0.03***
	(0.09)	(0.18)	
Year	1946.88	1956.28	-9.40***
	(7.10)	(5.15)	
Panel C: Room Controls			
Missing Rooms	0.11	0.02	0.09***
	(0.31)	(0.13)	
# Rooms	107.02	258.42	-151.40***
<i>H</i>	(143.24)	(279.71)	
# Apartments	0.25	0.06	0.19***
// Tiperelliene	(5.90)	(1.04)	0.10
# Suites	0.02	0.00	0.02
# Suites	(1.62)	(0.00)	0.02
# Cottages	0.08	0.02	0.06**
# Cottages	(2.04)	(0.46)	0.00
Panel D: Plan Type			
American	0.05	0.01	0.04***
	(0.22)	(0.09)	0.0 -
American Summer	0.06	0.01	0.05***
American Sammer	(0.24)	(0.12)	0.00
American Winter	0.01	0.01	0.00
American winter	(0.09)	(0.07)	0.00
European	0.82	0.94	-0.12***
European			-0.12
E C	(0.38)	(0.23)	0.00**
European Summer	0.04	0.03	0.02**
D W.	(0.21)	(0.16)	0.01***
European Winter	0.01	0.00	0.01***
3. 1.0 1.1	(0.12)	(0.06)	
Modified American	0.00 $(0.03)$	0.00 (0.04)	-0.00
D 15 G 1 G 1 1	, ,	(*** -)	
Panel E: County Control		26.45	0.00
# Est	34.12	36.45	-2.33
D 1 1 (4 )	(64.16)	(62.38)	
Population (1,000s)	392.90	810.85	-417.94***
	(915.54)	(1282.75)	
Share Black	0.08	0.06	0.01***
	(0.12)	(0.08)	
Observations	29,395	588	29,983

Notes: Means are reported with standard deviations in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

## C Details on Other Data Sources

#### C1 Additional Sources

Section E5 of this appendix presents a series of robustness checks where we control for possible confounding factors. We outline these additional sources, as well as additional information on the sources used in our main analysis here.

1940 Full Count Census of Population: Most of the controls in the robustness analysis are drawn from the 1940 Full Count Census of Population (Ruggles et al., 2024). This dataset is used to construct county-level variables for average Black income and labor force participation, the fraction of White and Black people with a high school degree, and the percent of Black migrants within and across state borders.

1950 Full Count Census of Population: We use the 1950 full count census (Ruggles et al., 2024) to construct county-level values for average income and labor force participation among the Black population. This variable is combined with equivalent variables from the 1940 full count census to measure the change in average income and the change in labor force participation between 1940 and 1950 which are used in controls in Section E5.

Haines' County Data Books: We use the Historical, Demographic, Economic, and Social Data: The United States, 1790-2002, by Michael Haines to control for the number of manufacturing workers in 1940. We also use this source to obtain the population of Black and White residents in 1940 and 1950. We control for the change in the White population between 1940 and 1950 as a robustness exercise.

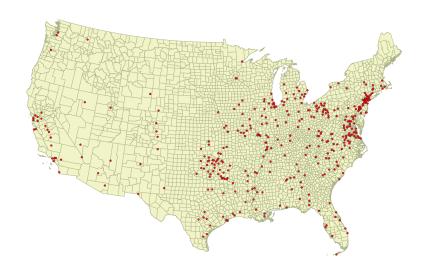
Censuses of Business, 1935 and 1948: We use these data to construct the change in the total number of firms between 1940 and 1950.

NAACP Chapters and Branches: The location of NAACP Chapters and Branches comes from the *Mapping American Social Movements Project* (Estrada and Hermida, 2020), which can be downloaded here: http://depts.washington.edu/moves/NAACP\_database.shtml. Our analysis uses the change in the number of NAACP chapters in counties between 1941 and 1957. In GIS software, we overlay the point file of NAACP Chapters and Branches with county boundary files from 1940 and construct a spatial join to determine the county in which each chapter or branch is located. Figure C.1 displays the location of these chapters

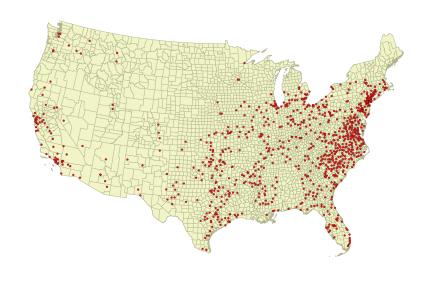
and the overlay in QGIS for 1941 and 1957.

Survey of Consumer Attitudes and Behavior: In Section A of this appendix, we provide a justification for why we believe using local consumer shocks to study the behavior of hotels is reasonable. In this exercise, we use information from the Spring 1958 Periodic Survey of Consumer Attitudes and Behavior, which we downloaded from ICPSR. We generate an indicator that equals 1 if an individual reports considering visiting friends or family when planning a vacation, and another that equals 1 if the individual plans to travel less than 200 miles. We also have an indicator that equals 1 if the respondent is Black, which is used as our independent variable.

County Business Patterns: In the same section, we also combine measures of the number of hotels and motels in each county in 2018 from the U.S. Census Bureau's 2018 County Business Patterns data with 2018 county-level population estimates from the U.S. Census Bureau's "Population, Population Change, and Estimated Components of Population Change." The number of hotels and motels are only reported for counties that listed 3 or more establishments.



(a) NAACP Chapters in 1941



(b) NAACP Chapters in 1957

Figure C.1: The location of NAACP Chapters in 1941 and 1957.

## C2 Time Consistent Counties

The units of observation in our analysis are 1940 counties. To account for historical county border changes, we employ Ferrara et al. (2021)'s county crosswalks with population-based weights that account for the urban-rural distribution of population across counties (model 2). These draw on Fang and Jawitz (2018)'s 1×1km grid-cell population distributions. An alternative approach is to use area-based weights (e.g. Hornbeck (2010)) which assumes uniform variable distribution across counties. Ferrara et al. (2021) demonstrate that weights accounting for population distribution patterns within counties outperform area-based weights for historical analyses.

# D Binned Scatterplot Depiction of the Instruments

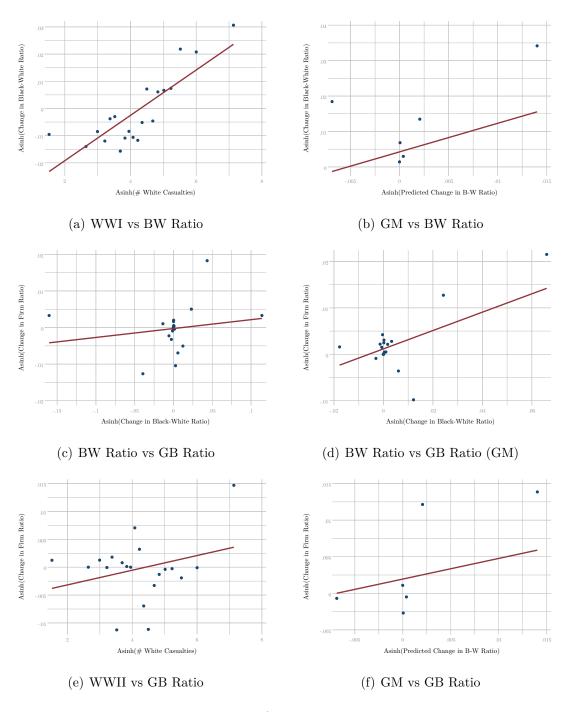


Figure D.1: Hotels: Binned scatter plots of the relationship between the instruments, endogenous regressor, and outcome.

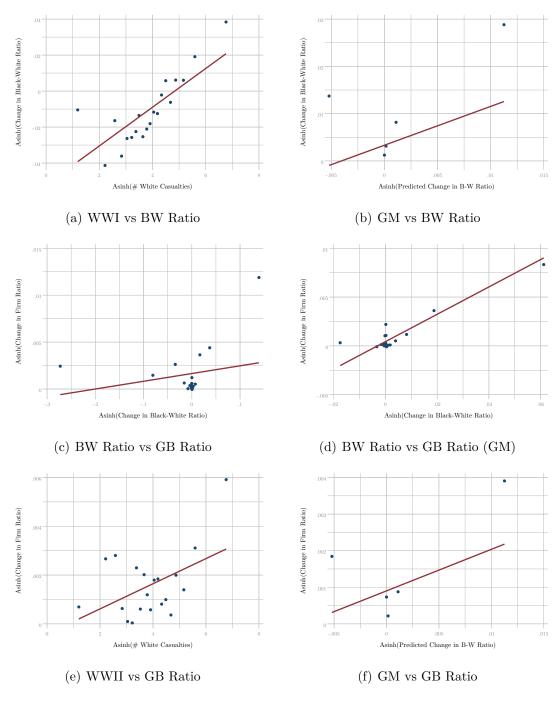


Figure D.2: Eating and Drinking Establishments: Binned scatter plots of the relationship between the instruments, endogenous regressor, and outcome.

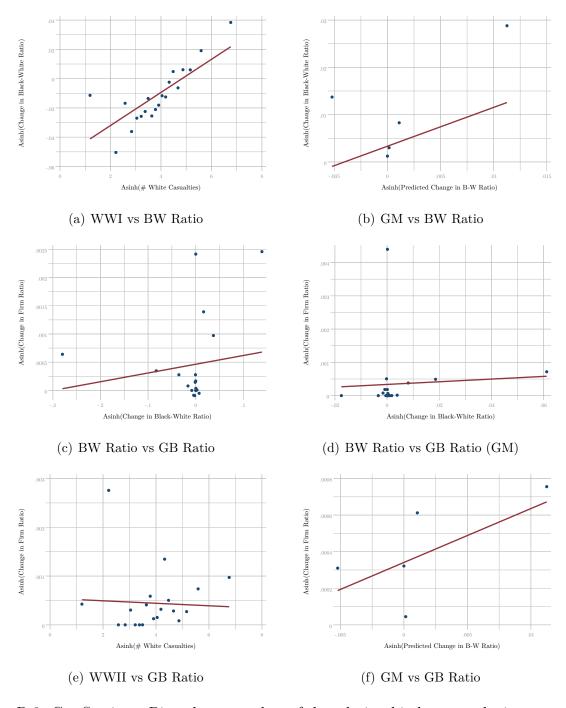


Figure D.3: Gas Stations: Binned scatter plots of the relationship between the instruments, endogenous regressor, and outcome.

# E Additional Results for Market Competition

## E1 Overidentified Model

Table E.1: IV results for the change in the ratio of non-discriminatory to discriminatory establishments

	Hotels	Eat/Drink	Gas
	(1)	(2)	(3)
Panel A: OLS results			
B-W Ratio	0.258***	0.162***	0.007
B W Italio	(0.048)	(0.017)	(0.014)
Constant	-0.050*	-0.000	0.001
Constant	(0.030)	(0.006)	(0.005)
Adjusted R <sup>2</sup>	0.044	0.042	-0.010
N. Obs	1254	1687	1683
Panel B: First stage results			
White Casualties	0.005***	0.004***	0.004***
	(0.000)	(0.000)	(0.000)
GM Ratio	0.427***	0.446***	0.446***
	(0.099)	(0.093)	(0.093)
Constant	0.113***	0.009	0.009
	(0.019)	(0.009)	(0.009)
Adjusted R <sup>2</sup>	0.291	0.277	0.277
N. Obs	1254	1687	1683
Panel C: Reduced form results			
White Casualties	0.003***	0.000	0.000
	(0.001)	(0.000)	(0.000)
GM Ratio	0.350**	0.107	0.043
	(0.178)	(0.071)	(0.057)
Constant	-0.056	0.004	0.001
	(0.034)	(0.007)	(0.005)
Adjusted R <sup>2</sup>	0.033	-0.007	-0.010
N. Obs	1254	1687	1683
Panel D: IV results			
B-W Ratio	0.549***	0.079	0.035
	(0.140)	(0.057)	(0.047)
Constant	-0.002	0.001	-0.000
	(0.006)	(0.002)	(0.002)
N. Obs	1254	1687	1683
First Stage F-Stat	81.2	85.0	84.3

Notes: The dependent variable in all columns is the inverse hyperbolic sine of the firm ratio, as defined in Section 3. All columns include state fixed effects and use both the WWII and GM instruments. Standard errors are in parentheses: \* p < 0.10, \*\*\* p < 0.05, \*\*\*\* p < 0.01.

- E2 Functional Form of Outcome and Treatment
- E2.1 Levels

Table E.2: IV results for the change in the ratio of non-discriminatory to discriminatory establishments

		WWII IV			GM IV	
	Hotels	Eat/Drink	Gas	Hotels	Eat/Drink	Gas
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: OLS result	ts					
B-W Ratio	0.018	0.009***	0.002			
	(0.023)	(0.003)	(0.002)			
B-W Ratio (GM)	()	()	( )	0.260***	0.165***	0.007
,				(0.049)	(0.018)	(0.015)
Constant	-0.005	0.001	0.000	-0.051*	-0.000	0.001
	(0.010)	(0.002)	(0.001)	(0.030)	(0.007)	(0.005)
Adjusted R <sup>2</sup>	0.010	0.000	-0.005	0.046	0.042	-0.010
N. Obs	1900	3051	3057	1254	1687	1683
Panel B: First stage	a magulta					
White Casualties	0.000***	0.000***	0.000***			
Willie Casualties	(0.000)	(0.000)	(0.000)			
GM Ratio	(0.000)	(0.000)	(0.000)	0.481***	0.518***	0.519***
GM Ratio				(0.104)	(0.096)	(0.096)
Constant	-0.042***	-0.111***	-0.111***	0.147***	0.031***	0.031***
Constant	(0.010)	(0.011)	(0.011)	(0.020)	(0.009)	(0.009)
Adjusted R <sup>2</sup>	0.107	0.132	0.133	0.211	0.217	0.218
N. Obs	1900	3051	3057	1254	1687	1683
11. 005	1300	3031	3037	1204	1007	1003
Panel C: Reduced for	orm results					
White Casualties	0.000***	0.000***	0.000			
	(0.000)	(0.000)	(0.000)			
GM Ratio	()	()	()	0.380**	0.111	0.045
				(0.182)	(0.072)	(0.058)
Constant	-0.007	-0.000	-0.000	-0.040	0.005	0.001
	(0.010)	(0.002)	(0.001)	(0.035)	(0.007)	(0.005)
Adjusted R <sup>2</sup>	0.015	0.001	-0.005	0.027	-0.007	-0.010
N. Obs	1900	3051	3057	1254	1687	1683
D 1D IV 1						
Panel D: IV results	0.610***	0.120***	0.010			
B-W Ratio	0.610***	0.130***	0.019			
D W D-4:. (CM)	(0.216)	(0.046)	(0.020)	0.700**	0.019	0.000
B-W Ratio (GM)				0.790**	0.213	0.086
0	0.010	0.01.4***	0.000	(0.386)	(0.134)	(0.111)
Constant	0.018	0.014***	0.002	-0.002	0.000	-0.000
N. Obs	(0.014)	(0.005)	(0.002)	(0.006)	(0.002)	(0.002)
	1900	3051	3057	1254	1687	1683
First Stage F-Stat	28.1	19.3	18.2	21.2	28.9	28.9

Notes: The dependent variable in all columns is the firm ratio, as defined in Section 3. The independent variable of interest and the instruments are also defined in terms of their levels. All columns include state fixed effects. Columns (1)-(3) use the WWII instrument and columns (4)-(6) use the Black migration instrument. Standard errors are in parentheses: \* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01.

# E2.2 Quantiles

Table E.3: IV results for the change in the ratio of non-discriminatory to discriminatory establishments

		WWII IV		GM IV			
	Hotels	Eat/Drink	Gas	Hotels	Eat/Drink	Gas	
	(1)	(2)	(3)	(4)	(5)	(6)	
Panel A: OLS resul	lts						
B-W Ratio	0.178***	0.174***	0.108***				
	(0.018)	(0.016)	(0.012)				
B-W Ratio (GM)	,	,	,	0.164***	0.189***	0.111***	
( )				(0.023)	(0.019)	(0.014)	
Constant	3.268	-1.407	-1.988	-14.430	47.729***	23.166**	
	(3.928)	(2.676)	(2.014)	(21.341)	(11.750)	(9.024)	
Adjusted R <sup>2</sup>	0.085	0.095	0.046	0.091	0.152	0.067	
N. Obs	1900	3051	3057	1254	1687	1683	
Panel B: First stage	a raculte						
White Casualties	0.345***	0.261***	0.261***				
Willie Castallies	(0.026)	(0.019)	(0.019)				
GM Ratio	(0.020)	(0.013)	(0.013)	0.329***	0.315***	0.313***	
CIVI Italio				(0.026)	(0.023)	(0.024)	
Constant	16.917***	10.380***	10.516***	67.112***	83.312***	83.392***	
Constant	(5.115)	(3.283)	(3.277)	(24.721)	(14.489)	(14.473)	
Adjusted R <sup>2</sup>	0.232	0.267	0.269	0.279	0.256	0.256	
N. Obs	1900	3051	3057	1254	1687	1683	
111 0 00	1000	0001	300.	1201	1001	1000	
Panel C: Reduced for	orm results						
White Casualties	0.161***	0.218***	0.129***				
	(0.021)	(0.017)	(0.013)				
GM Ratio	,	,	,	0.122***	0.206***	0.150***	
				(0.022)	(0.019)	(0.014)	
Constant	-0.628	-10.956***	-7.504***	-10.174	58.254***	28.258***	
	(4.168)	(2.854)	(2.154)	(21.503)	(11.573)	(8.803)	
Adjusted R <sup>2</sup>	0.065	0.106	0.051	0.076	0.161	0.094	
N. Obs	1900	3051	3057	1254	1687	1683	
Panel D: IV results							
B-W Ratio	0.466***	0.835***	0.494***				
D- W HallO	(0.064)	(0.082)	(0.057)				
B-W Ratio (GM)	(0.004)	(0.002)	(0.001)	0.370***	0.653***	0.480***	
D-W Rano (GM)				(0.068)	(0.069)	(0.054)	
	-8.517*	-19.628***	-12.698***	-16.172***	-27.537***	-24.090***	
Constant	-0.011	-13.020					
Constant	(4.835)	(4.020)	(2.790)	(5.696)	(5.030)	(4.710)	
Constant N. Obs	(4.835) 1900	(4.020) 3051	$\frac{(2.790)}{3057}$	(5.696) $1254$	(5.939) 1687	$\frac{(4.710)}{1683}$	

Notes: The dependent variable in all columns is the quantile of the firm ratio, as defined in Section 3. The independent variable of interest and the instruments are also defined in terms of their quantiles. All columns include state fixed effects. Columns (1)-(3) use the WWII instrument and columns (4)-(6) use the Black migration instrument. Standard errors are in parentheses: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

E3 Excluding Counties With No Migrants

Table E.4: IV results for the change in the ratio of non-discriminatory to discriminatory establishments

		WWII IV			GM IV	
	Hotels (1)	Eat/Drink	Gas (3)	Hotels (4)	Eat/Drink (5)	<b>Gas</b> (6)
	(1)	(-)	(3)	(1)	(*)	(0)
Panel A: OLS resul						
B-W Ratio	0.359***	0.067***	0.014***			
	(0.095)	(0.019)	(0.004)			
B-W Ratio (GM)				0.359***	0.067***	0.014***
				(0.095)	(0.019)	(0.004)
Constant	-0.022	-0.006	-0.006***	-0.022	-0.006	-0.006***
	(0.027)	(0.005)	(0.001)	(0.027)	(0.005)	(0.001)
Adjusted R <sup>2</sup>	0.055	0.017	0.172	0.055	0.017	0.172
N. Obs	312	322	321	312	322	321
Panel B: First stage	e results					
White Casualties	0.008***	0.008***	0.008***			
	(0.001)	(0.001)	(0.001)			
GM Ratio	( )	()	( )	0.521***	0.536***	0.538***
				(0.180)	(0.177)	(0.177)
Constant	-0.004	-0.002	-0.002	0.062***	0.063***	0.063***
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Adjusted R <sup>2</sup>	0.318	0.317	0.317	0.255	0.259	0.259
N. Obs	312	322	321	312	322	321
Panel C: Reduced for						
White Casualties	0.009***	0.001***	0.000***			
	(0.002)	(0.000)	(0.000)			
GM Ratio				0.401	0.160***	0.036***
				(0.294)	(0.058)	(0.011)
Constant	-0.060**	-0.011*	-0.008***	0.008	0.003	-0.004***
	(0.030)	(0.006)	(0.001)	(0.030)	(0.006)	(0.001)
Adjusted R <sup>2</sup>	0.061	0.001	0.169	0.012	-0.001	0.157
N. Obs	312	322	321	312	322	321
Panel D: IV results						
B-W Ratio	1.139***	0.166***	0.042***			
100010	(0.298)	(0.057)	(0.012)			
B-W Ratio (GM)	(0.200)	(0.001)	(0.012)	0.770	0.298**	0.066***
100010 (01.1)				(0.538)	(0.125)	(0.025)
Constant	-0.055*	-0.010*	-0.008***	-0.040	-0.016*	-0.009***
	(0.031)	(0.006)	(0.001)	(0.035)	(0.008)	(0.002)
N. Obs	312	322	321	312	322	321
First Stage F-Stat	34.8	34.4	34.4	8.4	9.2	9.2

Notes: The dependent variable in all columns is the inverse hyperbolic sine of the firm ratio, as defined in Section 3. All columns include state fixed effects. Columns (1)-(3) use the WWII instrument and columns (4)-(6) use the Black migration instrument. Standard errors are in parentheses: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

## E4 Expanded Definition of the Market

As we discussed in Section A of this appendix, there may be some concern that, in the case of hotels, shocks to local populations may not capture the relevant consumer base. While we argue that the local composition of consumers will be related to the composition of tourists, we perform an additional check where we expand our definition of the market to include neighboring counties. We use this definition only for the composition of the consumer base and we continue to measure the firm ratio at the county-level. This exercise relates county-level changes in the firm ratio to surrounding county changes in the consumer ratio. Table E.5 displays these results. Using the WWII instrument, we see in column (4) that for a 10% larger increase in the Black/White population ratio, the hotel firm ratio would increase by 2.5% more. For the migration instrument, we see a similar pattern to the earlier results. Column (8) shows that for a 10% increase in the Black/White population ratio, the hotel firm ratio would increase by 4.9%. Overall, the general finding of the relationship between consumer ratios and firm ratios holds when expanding the market area.<sup>10</sup>

Table E.5: IV results for the change in the ratio of non-discriminatory establishments (markets defined based off neighbors)

	WWII IV				$\operatorname{GM} \operatorname{IV}$			
	<b>OLS</b> (1)	1st Stage (2)	Red Form (3)	<b>IV</b> (4)	OLS (5)	1st Stage (6)	Red Form (7)	<b>IV</b> (8)
B-W Ratio	0.033 $(0.027)$			0.248** (0.108)				
White Casualties	,	0.015*** (0.001)	0.004** (0.002)	,				
B-W Ratio (GM)		, ,	,		0.385*** $(0.062)$			0.486*** (0.124)
GM Ratio					,	0.730*** (0.191)	1.503*** (0.076)	, ,
Constant	-0.005 $(0.009)$	-0.121*** (0.012)	-0.030** (0.014)	-0.000 (0.009)	-0.059** (0.030)	-0.053* (0.032)	0.042*** (0.013)	-0.002 (0.006)
Adjusted R <sup>2</sup> N. Obs	0.011 1896	0.236 1896	0.013 1896	-0.024 1896	0.051 1250	0.033 1250	0.508 1250	0.049 1250

Notes: The dependent variable in all columns is the inverse hyperbolic sine of the firm ratio, as defined in Section 3. All columns include state fixed effects. Columns (1)-(3) use the WWII instrument for own and neighbor counties and columns (4)-(6) use the Black migration instrument for own and neighbor counties. Standard errors are in parentheses: \* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01.

<sup>&</sup>lt;sup>10</sup>For hotels, we also find, in unreported results, that the effects are concentrated in counties that had at least one Green Book establishment in 1939.

E5 Robustness of Results to Alternatives for the Market Conditions Hypothesis

## E5.1 Robustness in WWII IV Specification

Context: Our model provides room for the possibility that  $\tilde{\eta}$  (the discrimination cut-off) was also changing during the period of our analysis. Since we are using exogenous shifts in the White population for identification, an important concern is whether World War II mortality or participation affected the attitudes of the White population. If the draft was largely fair—which the literature has established was the case, for example, see the discussion in Ferrara (2022)—and conditional on being drafted, the probability of death while serving was random, deaths should not have an important impact on the distribution of  $\eta$  in the remaining White population. That is, the share of the population with draws that are above the cut-off level,  $\tilde{\eta}$ , should be unaffected.

One additional concern is whether county-level exposure to military involvement affected racial attitudes, independent of mortality. White (2019) considers this issue in his study of whether WWII veterans came to hold more liberal attitudes on racial segregation than their counterparts who did not serve. Using the Negro Political Participation Study to study the impact of White veteran status on racial attitudes, White finds that Southern White veterans were "just as supportive of Jim Crow segregation as southern Whites who did not serve, and they were not any more sympathetic to the sit-in movement" (White, 2019, p. 93). WWII veteran status was not associated with liberalization in attitudes towards segregation or other policies to reduce inequities. If we accept this premise, this implies that White casualties were pulled from the same distribution of racial preferences as the rest of the White population-in expectation, areas with larger casualties would lose larger numbers of potentially discriminatory consumers than those with smaller casualties (holding all else equal this implies a larger change in  $\theta$ ) but the share of the White population that chooses to discriminate (i.e. those with draws of  $\eta$  above the discriminatory cut-off level) would not be affected. It is important to note that this concern is far less germane to the Black migration instrument.<sup>11</sup>

Previous literature has highlighted other possible factors that would call into question the

<sup>&</sup>lt;sup>11</sup>One limitation of the parsimonious modelling approach is that it is strongly focused on the demand for segregated and non-segregated services and, while there is an allowance for firm entry, the impact of changes to the Black and White population shares on input markets is not incorporated. One could imagine a setting in which changes to the sizes of the Black and White population affect the relative wages of the two groups or the occupational sorting across them. As a result, changes in the ratio of the Black to White population could affect the ratio of non-discriminatory to discriminatory firms via this mechanism as well as the demand mechanism that is outlined in the model. We leave to future work extending the model in a manner that incorporates more supply-side factors as this has the potential to enrich its predictions.

plausible exogeneity of the World War II instrument. For example, the economics literature suggests that exemptions were more common among farmers, fathers with dependents, and workers in war-related industries (Ferrara, 2022). Acemoglu et al. (2004) show empirically that mobilization was higher in states with higher levels of education and wages, <sup>12</sup> and those with older populations, lower levels of farming, and smaller Black populations. Recently, using the newly available 1950 full-count census, Collins and Zimran (2024) confirm some of these earlier findings and generate new insights into the nature of selection into service, which they argue can be reduced by using 1940 controls. In our analysis, if any factors that are related to selection into service are simultaneously correlated with the ratio of discriminatory to non-discriminatory firms, this will lead to a failure of the exclusion restriction to hold. Therefore, after we present our main specifications, we show that our results are robust to holding a wide range of these factors constant at their 1940 levels. We also show that accounting for changes in Black socioeconomic conditions and social activism does not alter our conclusions.

Another concern regarding the use of the WWII instrument is related to the impact of the Serviceman's Readjustment Act, more commonly known as the G.I. Bill. Between 1944 and 1971, hundreds of thousands of American veterans used the support of the G.I. Bills to purchase homes, attend post-secondary institutions, start businesses, and find jobs (Katznelson, 2005). However, a longstanding narrative has been that the G.I. Bills did not benefit veterans equally. Black veterans, especially in the South, faced systemic discrimination that prevented them from accessing many of the G.I. Bills' benefits. Previous literature has shown that, in the case of post-secondary attainment, the G.I. Bills helped a non-trivial number of White veterans attend college, while excluding African Americans from these same gains (Bound and Turner, 2002; Turner and Bound, 2003). Using the census linkages between 1940 and 1950, Collins and Zimran (2024) challenge some of this literature, showing that there were increases in educational attainment, earned income, and occupational status among Black veterans. Given this result, we consider changes in income and labor force participation in our analysis of the plausibility of the WWII instrument.

In addition to its effect on the racial composition of local markets that we identified in the previous sections, there is a substantial literature spanning history and political science that points to the Second World War and early 1950s as having important effects on the political attitudes and organization of Whites and Blacks as they pertained to matters of segregation and Civil Rights more generally (Brooks, 2004; Ward, 2011; White, 2019). There is also a body of work in economics documenting the impact of World War II on the economic well-being of African Americans specifically (Margo, 1995; Collins, 2001; Ferrara, 2022). Both

<sup>&</sup>lt;sup>12</sup>In contrast, Kriner and Shen (2010) show that casualty rates did not differ across socioeconomic groups.

of these forces could contribute to our empirical finding that WWII mobilization had a positive causal impact on the level of public accommodations available to the Black population.

Empirical Results: In Table E.6 we present estimates of the IV results using the World War II casualties in Panel D of Table 1 with controls for many of the aforementioned factors that could alter our preferred estimates. The sources for these controls are outlined in Section C of this appendix. All controls have been transformed using the inverse hyperbolic sine, in line with the firm and consumer ratios. Section E6 of this appendix provides more detail supporting this choice and also shows the results when we include our controls in levels. We discuss each potential confounder in turn below.

As discussed previously, column (1) restricts the analysis to counties outside the South, and shows that the estimate for hotels is closer in magnitude to the estimate obtained using the Black migration instrument, while those for eating and drinking establishments and gas stations are more similar to the results using the national sample. Column (2) controls for the share of farmland in 1940, which is an important proxy for urbanity and Black/White occupation and income differences, as well as WWII mobilization (Acemoglu et al., 2004). Our results are unchanged with the inclusion of these controls.

Next, we assess the possibility that our findings are due to an increase in African-American demand for consumer goods and services that resulted from the increased economic standing of African Americans during the 1940s and 1950s (Collins, 2000). Further, as incomes grew over this period, so, too, did car ownership. By 1955, estimates reported that African Americans owned half a billion dollars worth of automobiles (Sorin, 2020). Together, both higher incomes and greater access to travel through car ownership would have resulted in higher demand for goods and services offered by non-discriminatory places of business, effectively making integration more attractive for business owners.<sup>13</sup> To account for the potentially confounding effect of increased socioeconomic standing among African Americans during this period, we bring in the newly available 1950 full count census, which allows us to control for the change in average Black income and labor force participation in counties between 1940 and 1950. We include a dummy for counties that do not have any Black residents between the ages of 25 and 65 in 1940 or 1950. Column (3) includes these controls, which does not affect the magnitude of the coefficient estimates for hotels and eating and drinking establishments. The estimate for gas stations remains statistically insignificant and small in magnitude.

<sup>&</sup>lt;sup>13</sup>On a quantitative front, Ferrara (2022) links the increased socioeconomic standing among African Americans directly to occupational upgrading induced by WWII. Specifically, he shows that African Americans filled semi-skilled positions previously held by Whites that arose as a result of labor shortages stemming from the mortality of semi-skilled White soldiers.

Relatedly, we know from the existing literature that the growth in the manufacturing sector facilitated Black economic progress during WWII and the subsequent years, so a large manufacturing presence in 1940 is a reasonable proxy for the growth in Black socioeconomic standing during the wartime period. Column (4) adds a control for the number of manufacturing workers in 1940. This additional control does not alter the magnitude, sign, or statistical significance of the IV estimates.

In column (5) we directly consider Black political activism. Local Black political activism could have provided external market pressures, above and beyond the role of market composition. Alternatively, activism itself could be related to higher levels of White casualties, as there would be fewer prime-age White men to serve as resistance to Civil Rights activism. We test whether our main results hold when controlling for the change in NAACP chapters between 1941 and 1957. Most important, being a large national organization, the proxy of NAACP offices for nationally-linked Black political activism does not require us to restrict our analysis to the South and can further exploit the pre- and post-war presence of NAACP offices, which is not available for many other Black Civil Rights organizations with national footprints at the time. The spread of the NAACP does little to affect the magnitude, sign, nor statistical significance of the IV estimates.

A final concern is that the results could reflect the growth of the market more generally. The manufacturing control in column (4) helps assuage this concern, and in the final two columns we perform two additional checks of this nature. Column (6) controls for the change in the White population between 1940 and 1950 and column (7) controls for the change in the total number of establishments between 1940 and 1950. Again, neither of these controls alter our main conclusions.

<sup>&</sup>lt;sup>14</sup>The data for NAACP chapters comes from the Mapping American Social Movements Project (Estrada and Hermida, 2020) and can be accessed from http://depts.washington.edu/moves/NAACP\_database.shtml.

<sup>&</sup>lt;sup>15</sup>For example, the Student Non-Violent Coordinating Committee (SNCC) was founded in 1960 and the Southern Christian Leadership Conference (SCLC) was founded in 1957.

<sup>&</sup>lt;sup>16</sup>The sample size drops by 1 with the addition of this control because a county had to be included in the Census of Business in both 1935 and 1948.

Table E.6: IV results for the change in the ratio of non-discriminatory establishments: Robustness checks (WWII IV)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Hotels							
B-W Ratio	0.513***	0.227**	0.226**	0.392***	0.221**	0.395**	0.234**
	(0.149)	(0.094)	(0.092)	(0.114)	(0.095)	(0.182)	(0.098)
N. Obs	1254	1900	1900	1900	1900	1900	1900
First Stage F-Stat	141.7	102.7	107.9	77.7	100.7	34.1	96.0
Panel B: Eating &	Drinking Esta	blishments					
B-W Ratio	0.054	0.058***	0.052***	0.040**	0.056***	0.094***	0.029**
	(0.062)	(0.016)	(0.015)	(0.017)	(0.016)	(0.035)	(0.013)
N. Obs	1687	3051	3051	3051	3051	3051	3050
First Stage F-Stat	144.9	137.0	145.1	111.0	129.1	34.8	127.8
Panel C: Gas Static	ons						
B-W Ratio	0.025	0.009	0.013	0.007	0.010	0.013	0.008
200	(0.050)	(0.008)	(0.008)	(0.009)	(0.008)	(0.016)	(0.008)
N. Obs	1683	3057	3057	3057	3057	3057	3056
First Stage F-Stat	143.4	139.7	149.6	107.3	133.2	40.6	134.9

Notes: The dependent variable in all columns is the inverse hyperbolic sine of the firm ratio, as defined in Section 3. All columns include state fixed effects. The instrument in this table is the WWII instrument. Column (1) restricts to counties outside the South; column (2) controls for the share of farmland in 1940; (3) for the change in Black income and labor force participation between 1940 and 1950; (4) for the number of manufacturing workers in 1940; (5) for the change in the number of NAACP chapters between 1941 and 1957; (6) for the change in the White population between 1940 and 1950; (7) for the change in the total number of firms between 1940 and 1950. Standard errors are in parentheses: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

#### E5.2 Robustness in Black Migration IV Specification

Context: As we discuss in the main manuscript, using predicted migration flows over actual migration flows is advantageous; however, we want to ensure that our Southern push factors were orthogonal to Northern pull factors. Controls for farmland are not as germane since migration was overwhelmingly to urban areas; however, a known driver of migration during this period was the educational difference between Blacks and Whites, which would be pronounced in areas where Black Americans had greater access to education. In the robustness analysis in this section, we consider this, as well as involvement in manufacturing, broader migration patterns, changes in income and labor force participation, social activism via the spread of NAACP chapters, and changes in the total number of firms.

**Empirical Results:** We control for education using the share of the Black population who, in 1940, had a high school education. This estimate is found in Column (1) and does not alter the IV estimates. Manufacturing was also a known pull factor for Black individuals who moved during the Great Migration, so we include the number of manufacturing workers in 1940 as a control in column (2). Here, the coefficient estimate increases in magnitude and remains statistically significant at the 10% level. Column (3) controls for the fraction of the Black population in 1940 that had migrated either between or within states, as other migration patterns could confound the patterns we observe in the data. Column (4) considers changes in the socioeconomic conditions of Black Americans by controlling for the change in Black income and labor force participation between 1940 and 1950, while column (5) accounts for Black political activism by including the change in NAACP chapters. Finally, column (6) accounts for the change in the total number of firms. None of these controls meaningfully alter our main conclusions. Our finding that the ratio of Black to White (potential) consumers is a primary driver of the firm ratio and is unaffected by the inclusion of these controls is consistent with the empirical industrial organization literature on firm entry that finds that market size is the dominant driver of firm entry decisions (see, e.g., Mazzeo (2002)'s study of motels and Seim (2006)'s study of video rental stores).<sup>17</sup>

<sup>&</sup>lt;sup>17</sup>Indeed, this was recognized by Bresnahan and Reiss (1991)'s seminal study about the determinants of firm entry across five different service and retail industries in small markets.

Table E.7: IV results for the change in the ratio of non-discriminatory establishments: Robustness checks (GM IV)

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Hotels						
ranet A: notets						
B-W Ratio	0.772**	0.932*	0.838**	0.791**	0.813**	0.779**
	(0.373)	(0.505)	(0.401)	(0.384)	(0.393)	(0.377)
N. Obs	1254	1254	1254	1254	1254	1254
First Stage F-Stat	22.1	13.4	19.4	20.9	20.3	21.5
Panel B: Eating & D	rinking Establish	ments				
B-W Ratio	0.209	0.260*	0.222	0.214	0.231*	0.227*
	(0.130)	(0.157)	(0.136)	(0.133)	(0.137)	(0.128)
N. Obs	1687	1687	1687	1687	1687	1687
First Stage F-Stat	29.8	21.2	27.3	28.5	27.2	30.9
Panel C: Gas Station	is					
B-W Ratio	0.088	0.092	0.092	0.090	0.090	0.087
	(0.108)	(0.129)	(0.112)	(0.110)	(0.114)	(0.110)
N. Obs	1683	1683	1683	1683	1683	1682
First Stage F-Stat	29.8	21.3	27.4	28.5	27.3	28.6

Notes: The dependent variable in all columns is the inverse hyperbolic sine of the firm ratio, as defined in Section 3. All columns include state fixed effects. The instrument in this table is the Black migration instrument. Column (1) controls for the share of the Black population with a high school degree, (2) for the number of manufacturing workers in 1940; (3) for the fraction of the Black population who migrated within and across states; (4) for the change in Black income and labor force participation between 1940 and 1950; (5) for the change in the number of NAACP chapters between 1941 and 1957; (6) for the change in the total number of firms between 1940 and 1950. Standard errors are in parentheses: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

### E6 Selecting the Functional Form for Controls

In the previous section, we considered a number of factors that may confound our main estimates of the impact of population composition on the firm composition. We chose to transform our controls using the inverse hyperbolic sine, as we do with the dependent variables, main independent variables, and the instruments. This decision was guided by the descriptive analysis in this section. Section E6.1 displays density plots of all controls, dependent variables, independent variables, and instruments, where it is clear that many of them contain a large number of zeroes or have a distribution that is heavily skewed. Nevertheless, in Section E6.2 we also show that controlling for these factors in levels generally does not alter our conclusions. One exception is the change in the number of NAACP chapters between 1941 and 1957. Here, the coefficient estimates decrease slightly in magnitude and are no longer statistically significant for any of the industries. That being said, the appearance of a large number of zeroes in the distribution of this variable suggests that it is appropriate to transform it using the inverse hyperbolic sine function.

### E6.1 Density Plots

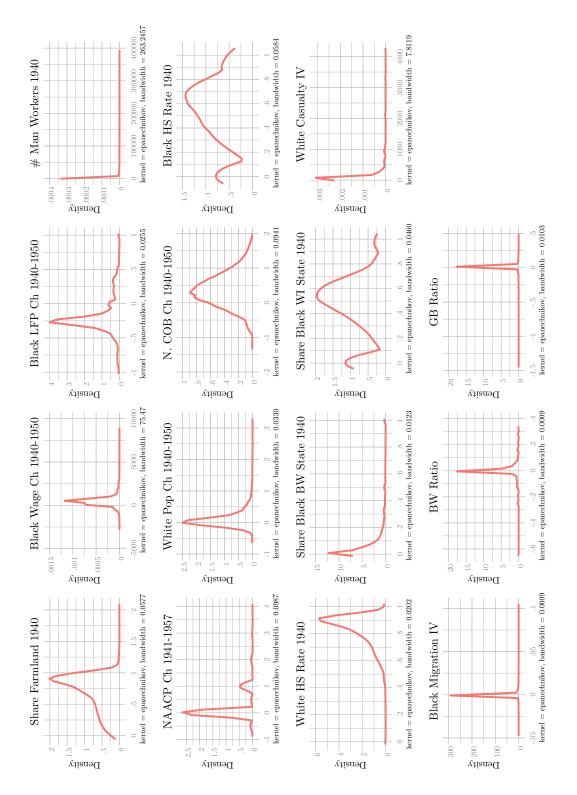


Figure E.1: Density plots for dependent variable, treatment variable, instruments, and covariates used in hotel analysis.

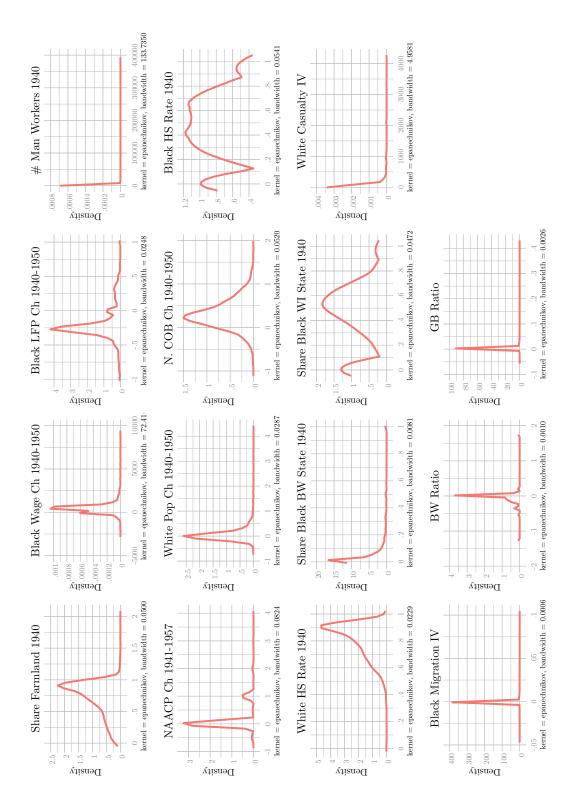


Figure E.2: Density plots for dependent variable, treatment variable, instruments, and covariates used in eating and drinking analysis.

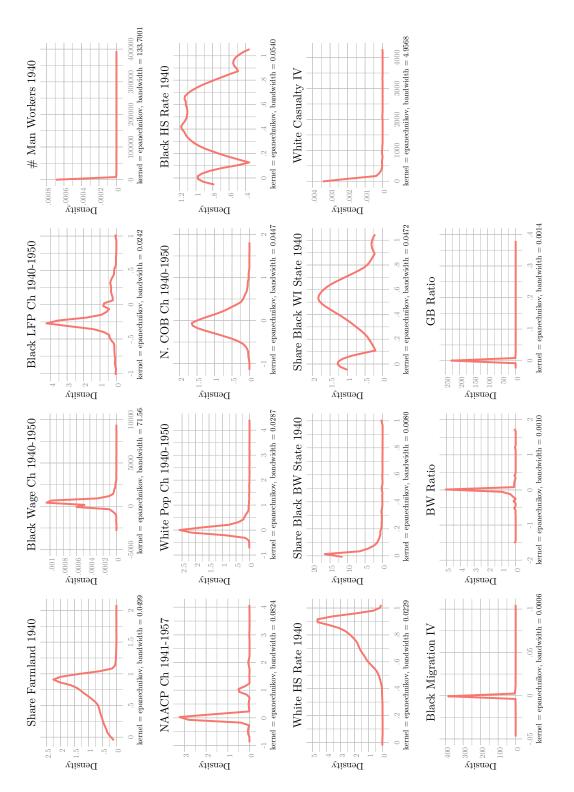


Figure E.3: Density plots for dependent variable, treatment variable, instruments, and covariates used in gas station analysis.

### E6.2 Including Controls in Levels

Table E.8: IV results for the change in the ratio of non-discriminatory establishments: Robustness checks (WWII IV)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
D 14 W.1							
Panel A: Hotels							
B-W Ratio	0.513***	0.225**	0.221**	0.212**	0.220**	0.353**	0.230**
	(0.149)	(0.094)	(0.092)	(0.107)	(0.096)	(0.163)	(0.097)
N. Obs	1254	1900	1900	1900	1900	1900	1900
First Stage F-Stat	141.7	102.1	107.7	79.0	98.5	41.4	97.7
Panel B: Eating &	Drinking Esta	blishments					
B-W Ratio	0.054	0.058***	0.056***	0.053***	0.057***	0.093***	0.029**
	(0.062)	(0.016)	(0.015)	(0.017)	(0.016)	(0.033)	(0.013)
N. Obs	1687	3051	3051	3051	3051	3051	3050
First Stage F-Stat	144.9	135.2	141.1	114.9	126.6	40.1	128.7
Panel C: Gas Static	ons						
B-W Ratio	0.025	0.008	0.013*	0.007	0.010	0.013	0.008
	(0.050)	(0.008)	(0.008)	(0.009)	(0.008)	(0.015)	(0.008)
N. Obs	1683	3057	3057	3057	3057	3057	3056
First Stage F-Stat	143.4	138.1	145.4	119.8	130.6	45.6	134.9

Notes: The dependent variable in all columns is the inverse hyperbolic sine of the firm ratio, as defined in Section 3. All columns include state fixed effects. The instrument in this table is the WWII instrument. Column (1) restricts to counties outside the South; column (2) controls for the share of farmland in 1940; (3) for the change in Black income and labor force participation between 1940 and 1950; (4) for the number of manufacturing establishments in 1940; (5) for the change in the number of NAACP chapters between 1941 and 1947; (6) for the change in the White population between 1940 and 1950; (7) for the change in the total number of firms between 1940 and 1950. Standard errors are in parentheses: \* p < 0.10, \*\*\* p < 0.05, \*\*\*\* p < 0.01.

Table E.9: IV results for the change in the ratio of non-discriminatory establishments: Robustness checks (GM IV)

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Hotels						
1 01100 71. 110000						
B-W Ratio	0.771**	4.403	0.836**	0.781**	0.812**	0.777**
	(0.374)	(8.514)	(0.400)	(0.377)	(0.393)	(0.377)
N. Obs	1254	1254	1254	1254	1254	1254
First Stage F-Stat	21.9	0.3	19.6	21.5	20.3	21.5
Panel B: Eating & D	rinking Establish	ments				
B-W Ratio	0.209	1.039	0.223	0.214	0.230*	0.227*
	(0.131)	(1.325)	(0.136)	(0.131)	(0.137)	(0.129)
N. Obs	1687	1687	1687	1687	1687	1687
First Stage F-Stat	29.6	0.7	27.5	29.3	27.1	30.6
Panel C: Gas Station	ls					
B-W Ratio	0.088	0.448	0.092	0.089	0.091	0.087
	(0.108)	(0.872)	(0.112)	(0.108)	(0.114)	(0.110)
N. Obs	1683	1683	1683	1683	1683	1682
First Stage F-Stat	29.7	0.7	27.6	29.3	27.2	28.6

Notes: The dependent variable in all columns is the inverse hyperbolic sine of the firm ratio, as defined in Section 3. All columns include state fixed effects. The instrument in this table is the Black migration instrument. Column (1) controls for the share of the Black population with a high school degree, (2) for the number of manufacturing establishments in 1940; (3) for the fraction of the Black population who migrated within and across states; (4) for the change in Black income and labor force participation between 1940 and 1950; (5) for the change in the number of NAACP chapters between 1941 and 1947; (6) for the change in the total number of firms between 1940 and 1950. Standard errors are in parentheses: \* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01.

# F Additional Price Results

## F1 Alternative Price Definitions and Functional Forms

Table F.1: Prices and the level of competition in county markets

	Le	vels	Lo	gs
	(1)	(2)	(3)	(4)
Number of Establishments	-0.015*** (0.002)	-0.013*** (0.002)	-0.001*** (0.000)	-0.001** (0.000)
Adjusted R <sup>2</sup> N. Obs	0.623 $29983$	0.654 $29983$	0.704 29983	0.767 29983

Notes: The dependent variable is the composite price (in levels or logs). Standard errors in parentheses. Columns (1) and (3) control for the county population and its square, the share of the population that is Black, and year and plan type fixed effects. Columns (2) and (4) control for the county population and its square, the share of the population that is Black, year and plan type fixed effects, whether the establishment was accredited by the AHA, the number of rooms by type (room, apartment, suite, cottage, missing), and whether the name of the establishment includes hotel or motel.

Table F.2: Price Differentials at Black-Friendly Businesses

		Composite Price				European Minimum			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Panel A: Prices	in Levels								
Black-Friendly	0.648*** (0.072)	0.582*** (0.090)	0.540*** (0.113)	0.299*** (0.113)	0.830*** (0.059)	0.788*** (0.064)	0.701*** (0.104)	0.457*** $(0.091)$	
Adjusted $\mathbb{R}^2$	0.567	0.593	0.616	0.649	0.462	0.509	0.543	0.599	
Panel B: Prices	in Logs								
Black-Friendly	0.224*** (0.018)	0.208*** (0.021)	0.181*** (0.020)	0.105*** (0.020)	0.223*** (0.018)	0.209*** (0.022)	0.177*** (0.020)	0.103*** (0.020)	
Adjusted R <sup>2</sup> N. Obs	0.617 $29983$	0.660 $29983$	0.704 29983	0.767 29983	0.501 $26372$	0.562 $26372$	0.617 $26372$	0.702 $26372$	

Notes: Standard errors in parentheses, clustered at the level of the fixed effects. All columns include plan type and year fixed effects. Columns (2) and (6) add state fixed effects, columns (3) and (7) replace state fixed effects with county fixed effects, and columns (4) and (8) add controls for the number of rooms by type, whether the name of the establishment includes the word *hotel* or *motel*, whether it was accredited by the American Hotel Association in 1940 or 1950, the county population and its square, and the share of the population that is Black. Standard errors, clustered by county, are in parentheses: \* p < 0.10, \*\*\* p < 0.05, \*\*\*\* p < 0.01.

## F2 Bounding the Price Regressions

Table F.3 displays columns (1)-(4) from the main price results (Table 4), where we have included the coefficient estimates on all controls in column (4). Column (5) is an additional specification that includes the full set of controls, but omits state or county fixed effects. We will use the methodology of Cinelli and Hazlett (2020) to evaluate the stability of the coefficient on "Black-friendly" from column (5).

Table F.3: Price differences at Black-friendly businesses

	(1)	(2)	(3)	(4)	(5)
Black Friendly	0.223***	0.209***	0.177***	0.103***	0.097***
	(0.018)	(0.022)	(0.020)	(0.020)	(0.020)
AHA Accreditation				0.288***	0.284***
				(0.012)	(0.010)
# Rooms				0.001***	0.001***
				(0.000)	(0.000)
# Apts				0.002**	0.002**
				(0.001)	(0.001)
# Suites				0.004***	0.004***
				(0.001)	(0.001)
# Cottages				0.002	0.004**
30				(0.002)	(0.002)
Missing Rooms				0.002	-0.021**
				(0.011)	(0.010)
Name Has Hotel				-0.140***	-0.193***
				(0.013)	(0.012)
Name Has Motel				0.269***	0.260***
a				(0.036)	(0.029)
County Shr Black				-0.044	0.293***
a				(0.177)	(0.046)
County Pop				0.000	0.000***
a				(0.000)	(0.000)
County Pop Squared				-0.000	-0.000**
a	0.001444	0 ==0444	0 =00444	(0.000)	(0.000)
Constant	0.964***	0.779***	0.708***	0.535***	0.800***
	(0.021)	(0.039)	(0.050)	(0.081)	(0.069)
Year F.E.	X	X	X	X	X
Plan Type F.E.	X	X	X	X	X
State F.E.		X			
County F.E.			X	X	
Controls				X	X
Adjusted R <sup>2</sup>	0.501	0.562	0.617	0.702	0.661
N. Obs	26372	26372	26372	26372	26372

Notes: Standard errors in parentheses, clustered at the level of the fixed effects. The dependent variable is the natural logarithm of the minimum European price. All columns include year and plan type fixed effects. Controls include whether the establishment was accredited by the AHA, the number of rooms by type (room, apartment, suite, cottage, missing), whether the name of the establishment includes hotel or motel, the county population and its square, and the share of the population that is Black.

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