Online Appendix for "Diversity for Access?"

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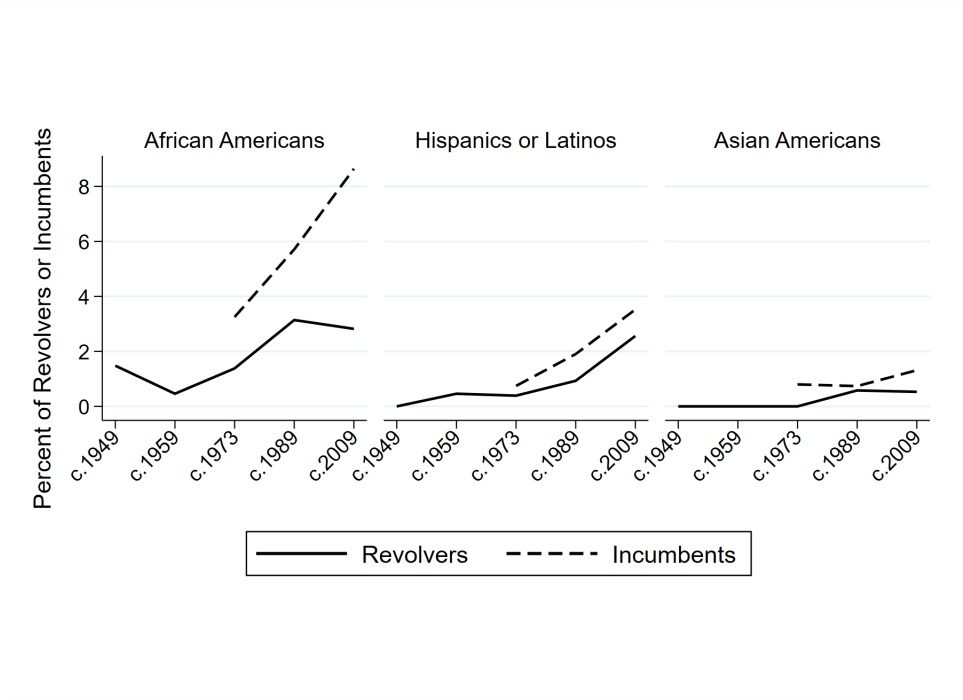
A1 Revolving-Door Lobbyists

We provide descriptive information regarding the identities of revolving-door lobbyists in the states. Using lists of legislators produced by the Council of State Governments and Klarner et al. (2013), we determined if each lobbyist in our data set was a former legislator. Following Strickland (2020), we identified former legislators by matching names between lists of lobbyists and legislators within states. For the first time, information about the identities of state revolvers is presented. LaPira and Thomas (2017) presented information on revolvers' identities in Congress.

Table A1 presents numbers of revolvers by ethnicity or race for the states we examined. From the table, practically no nonwhite legislators became lobbyists prior to the 1970s. This may be due to few legislators being nonwhite in the first place. Since then, however, numbers of such revolvers have increased faster than those of all revolvers generally. These numbers are based on the Imai and Khanna (2016) identification method.

Figure A1 presents the percentages of former legislators who lobbied who were nonwhite, as well as the percentages of incumbents who were nonwhite. The figure illustrates trends similar to those in Figure 3 in the main text. African Americans lost ground in terms of revolver totals: despite growing numbers of black legislators, the percentage of former legislators who lobby and who were black declined between 1989 to 2009 from about 3.1 to 2.8 percent. The absence of revolvers may help to explain growing disparities in clientele sizes between black and non-black lobbyists. Since incumbents may have preferred to serve for quite some time before retiring and becoming lobbyists, if we lag (shift right) incumbent percentages by one period, then Hispanic or Latino and Asian-American incumbents appear to have began entering lobbying at similar rates to all other legislators, although Asian-American legislators were slightly less likely to lobby even by this metric. (About 0.74 percent of legislators in 1989 were Asian-American, but only 0.53 percent of revolvers in 2009 were Asian-American. These figures respectively are 1.9 and 2.56 percent for Hispanics or Latinos.)

Figure A1: Diversity of Revolving-Door Lobbying



A2 Reliability of Identity Coding

In this section, we show that the Imai and Khanna (2016) method of identifying the ethnicities or races of lobbyists predicts identities accurately for the most part for all groups except African Americans. The general success of Imai and Khanna's method is due, for any given lobbyist, to there being higher probabilities assigned for correct identities and lower probabilities for incorrect identities.

To gain a sense of how well the Imai and Khanna (2016) coding method predicts lobbyists' identities, we compared the estimates this method produced for revolving-door lobbyists to the coding performed by Klarner (2021). Klarner used legislative biographies and other sources (not including a survey) to identify the ethnic or racial identities of all state legislators elected since 1971. Given that we used his list of legislators to identify revolving-door lobbyists within our lobbyist registration data, we use our sample of 1,992 revolvers from the 1970s, 1980s, and 2000s to provide an impression of the accuracy of the Imai and Khanna (2016) method. We are assuming that Klarner's identity data are reliable. Moreover, we

Table A1: Ethnicity and Race in State Lobbying Over Time

Variable	c.1949 (21 states)	c.1959 (26 states)	c.1973 (48 states)	c.1989 (49 states)	c.2009 (50 states)	Absolute Change (1973 - 2009)	Relative Change (1973 - 2009)
Revolving-Door Lobbyists	135	217	507	858	1132	625	223.27
African American	2	1	7	26	32	25	357.14
Hispanic or Latino	0	1	2	7	28	26	1300
Asian American	0	0	0	5	6	6	-

have no reason to think that the demonstrated accuracy of revolver identities would differ from that of all other lobbyists in our sample; so we use the results of these robustness checks to inform our approach to identifying all lobbyists in our sample.

Klarner's identity data assigns a particular ethnicity or race (i.e., white, black, Cuban or Latino, Asian, indigenous, and other [often two or more races]) to every legislator. The categories generally match those used by Imai and Khanna. Table A1 presents mean predicted probabilities for different identities (from Imai and Khanna) for different groups of legislators identified by Klarner. For example, the numbers in the second column present the mean predicted probability for all revolving-door lobbyists identified as white by Klarner. The mean probabilities that match identities in both the top row and left column are presented in bold text.

Table A2: Mean Probabilities of Identities under Imai and Khanna (2016)

	White American	African American	Hispanic or Latino	Asian American	Other American
Avg. Pred. White American	**0.767**	0.525	0.281	0.053	0.805
Avg. Pred. African American	0.152	**0.418**	0.053	0.008	0.029
Avg. Pred. Hispanic or Latino	0.037	0.020	**0.625**	0.010	0.021
Avg. Pred. Asian American	0.018	0.007	0.029	**0.753**	0.006
Avg. Pred. Other American	0.026	0.031	0.012	0.086	**0.141**
Total Revolvers	1883	46	45	11	7

From the statistics presented in Table A2, former legislators who lobbied and who were identified as white by Klarner had a mean predicted chance of being white of 0.767. This number is significantly higher than any others in the second column, which suggests that white legislators were generally identified successfully (but we do not present any tests here). This may be said about every other group of legislators except for African Americans. These legislators had a higher mean probability of being identified as white than being identified as black. All these numbers, however, poorly reflect the ability of Imai and Khanna's method to "rule out" the incorrect identities for lobbyists. Since the method can misidentify lobbyists in two ways, it is important to see distributions of probabilities by ethnicity and race: for

example, white lobbyists may be misidentified as nonwhite (a false negative) and nonwhite lobbyists may be identified as white (a false positive).

We present histograms of predicted probabilities for every group. These are similar to the histograms we present in the main text, except that they are presented by Klarner's coded groups. Figure A2, for example, presents the histogram of probabilities that each revolving-door lobbyist is white, divided by whether those individuals were identified by Klarner as white. Similarly, Figure A3 presents histograms for the probability that each lobbyist is African American. These figures, along with those presented for other groups, show that people may be misidentified in two ways; but that by assigning thresholds for identifying lobbyists in our broader sample, we successfully identify high percentages of lobbyists' ethnicities or races. From Figure A2, if we adopt a 50-percent cut point for identifying white lobbyists, then few non-white lobbyists are predicted to be white with more than 50 percent probability; and many white lobbyists are correctly identified. Looking at the left panel of the figure, all of the non-white lobbyists to the left of 0.5 on the bottom axis would not be considered white (the correct conclusion). On the right panel, all of the lobbyists graphed to the right of 0.5 on the bottom axis would be considered white (also the correct conclusion). Those charted appearing in the middle of the entire figure would be incorrectly identified, such that higher bars towards the ends of the two panels show that most lobbyists are correctly identified. From Figure A2, these trends are different for African-American lobbyists: many non-black lobbyists are correctly identified as non-black, but roughly equal numbers of black lobbyists are estimated to be black with 50 percent or less certainty as with 50 percent or more.

Table A3 presents how often Imai and Khanna's (2016) method successfully predicted lobbyist ethnicity or race for different cut points. The cut points are listed on the top row, and the left-most column includes different ethnic or racial groups. For white lobbyists, for example, Imai and Khanna's model assigned a 50-percent or greater probability of being white to 1759, or roughly 88.3 percent of, lobbyists coded as white by Klarner. Whenever

Figure A2: Probability White (Lobbyist Data)

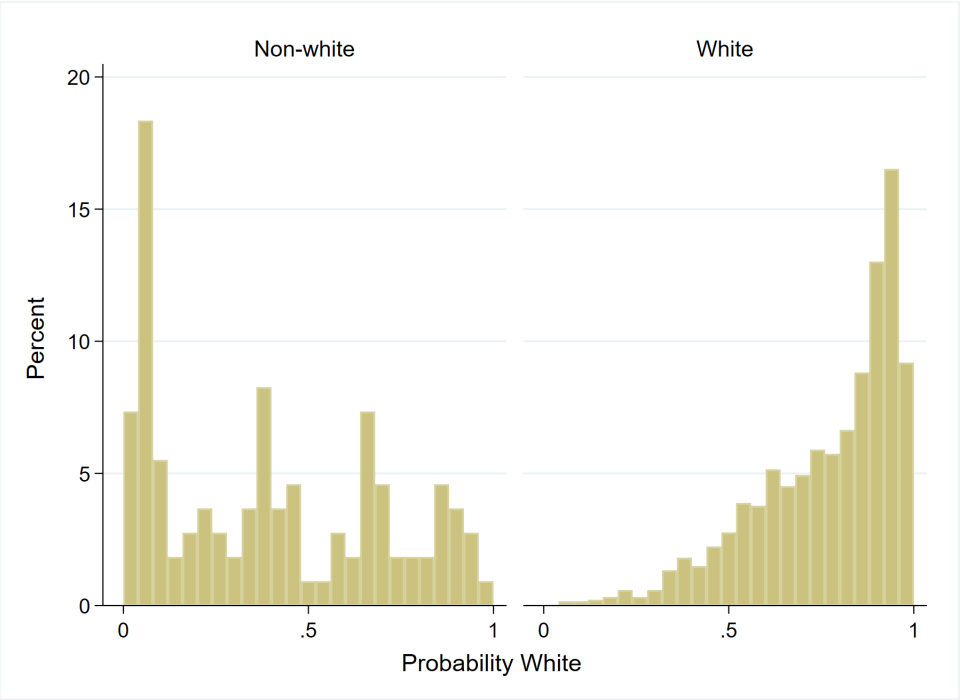


Figure A3: Probability African American (Lobbyist Data)

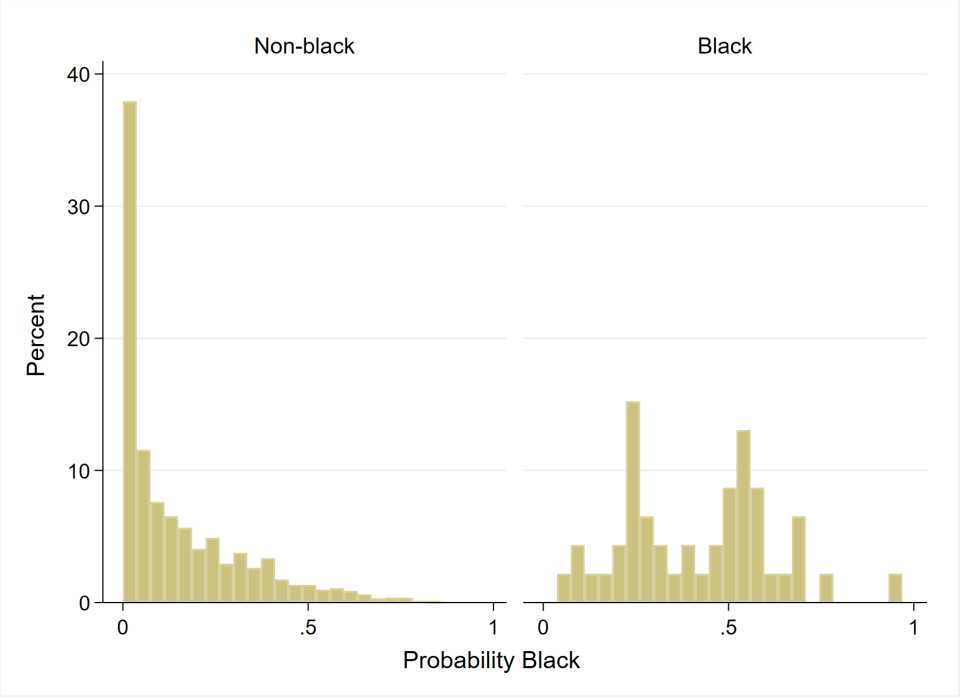


Figure A4: Probability Hispanic or Latino (Lobbyist Data)

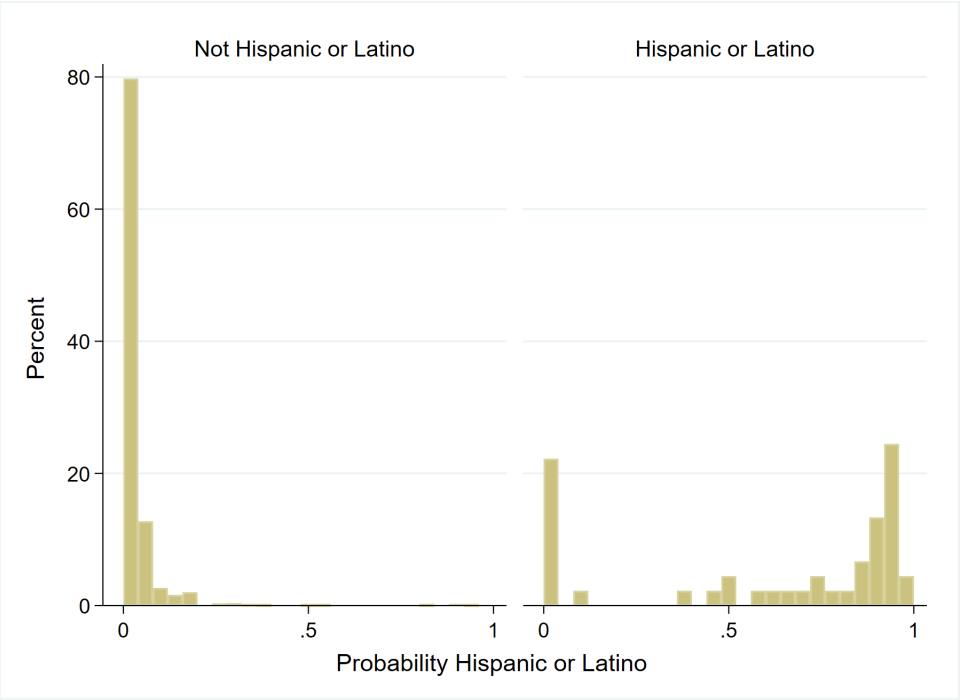


Figure A5: Probability Asian American (Lobbyist Data)

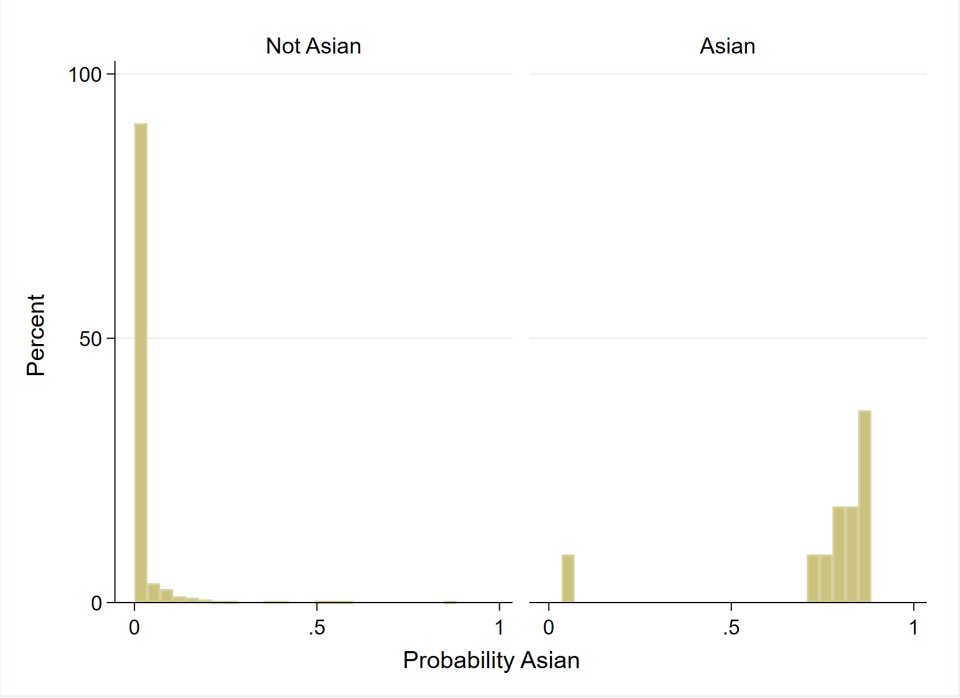
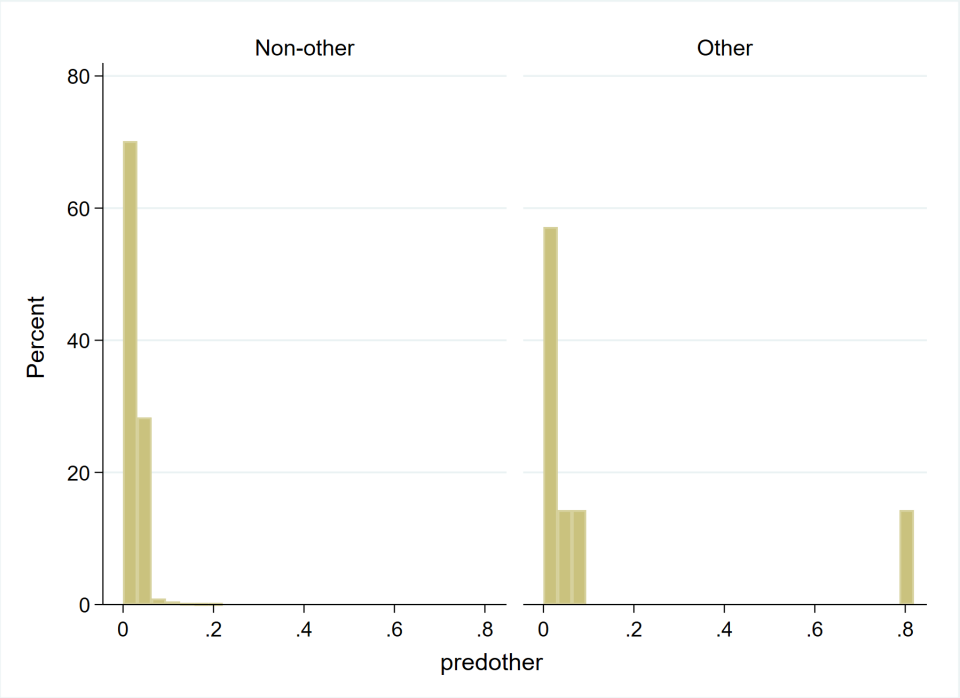


Figure A6: Probability Other American (Lobbyist Data)



we move the threshold to 60 percent or higher, then around 79.8 percent of all revolving-door lobbyists in the sample are correctly identified. With higher thresholds, the percentage of lobbyists who are correctly identified diminishes. In terms of incorrect identification: whereas more non-white lobbyists are identified as white at lower cut points, more white lobbyists are not identified as white with higher thresholds.

The table also provides numbers of true and false positives and negatives. These numbers provide a sense of the nature of the error of the Imai and Khanna method. Using the 50-percent threshold for white revolvers, for example, the method correctly identified 1688 lobbyists as white and 38 lobbyists as non-white. Unfortunately, 71 lobbyists were incorrectly identified as white and 195 were incorrectly identified as non-white.

In general, the figures presented in Table A3 suggest that Imai and Khanna's (2016) coding method is generally reliable for identifying the ethnicity or race all lobbyists except African-American lobbyists. To illustrate this point, we calculated the number of lobbyists within each ethnic or racial group identified by Imai and Khanna who were correctly identified

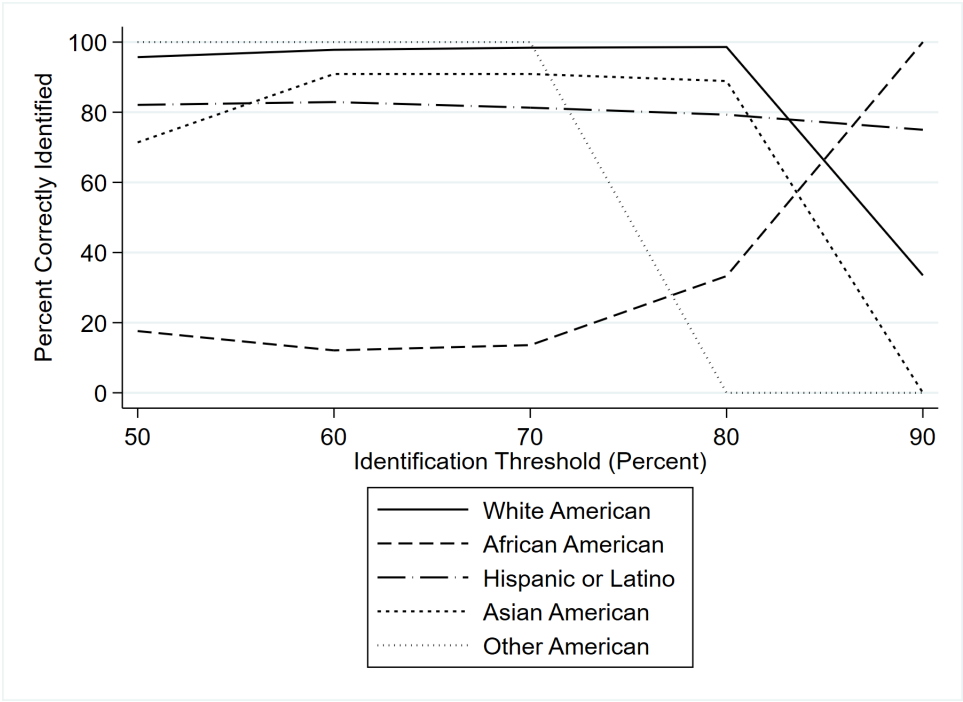
according to Klarner. The results are presented in Figure A7, which is also presented in the main text. At all cut points except 90 percent, more than 90 percent of the lobbyists identified as white by Imai and Khanna were indeed white according to Klarner. Low proportions of African Americans identified by Imai and Khanna were actually black, however, for all cut points. The proportion increases at the 90-percent cut point but only because so few people are identified as black. The results are more promising for the other ethnic or racial groups.

How accurate the lobbyist totals produced by Imai and Khanna (2016) to those produced by Klarner (2021)? From Table A1, Imai and Khanna's method identified 32 African-American revolvers, 28 Hispanic or Latino revolvers, and 6 Asian-American revolvers active in the states around 2009. From Klarner's coding, these totals are respectively 37, 37, and 6 revolvers.

Table A3: Descriptive Statistics for Comparison of Coding Methods

Prediction Status, Group	50-percent Probability	60-percent Probability	70-percent Probability	80-percent Probability	90-percent Probability
Correct, White American	1726 (86.6)	1589 (79.8)	1367 (68.6)	1114 (55.9)	734 (36.8)
True Positive / True Negative	1688 / 38	1514/75	1278/89	1020/94	631/103
Incorrect, White American	266 (13.4)	403 (20.2)	625 (31.4)	878 (44.1)	1258 (63.2)
False Positive / False Negative	71 / 195	34/369	20/605	15/863	1252/6
Correct, African American	1858 (93.3)	1902 (95.5)	1930 (96.9)	1945 (97.6)	1947 (97.7)
True Positive / True Negative	19 / 1839	7 / 1895	3 / 1927	1 / 1944	1 / 1946
Incorrect, African American	134 (6.7)	90 (4.5)	62 (3.1)	47 (2.4)	45 (2.3)
False Positive / False Negative	107 / 27	51 / 39	19 / 43	2 / 45	0 / 45
Correct, Hispanic or Latino	1972 (99)	1970 (98.9)	1967 (98.7)	1964 (98.6)	1957 (98.2)
True Positive / True Negative	32 / 1940	29 / 1941	26 / 1941	23 / 1941	15 / 1942
Incorrect, Hispanic or Latino	20 (1)	22 (1.1)	25 (1.3)	28 (1.4)	35 (1.8)
False Positive / False Negative	7 / 13	6 / 16	6 / 19	6 / 22	5 / 30
Correct, Asian American	1987 (99.7)	1990 (99.9)	1990 (99.9)	1988 (99.8)	1981 (99.4)
True Positive / True Negative	10 / 1977	10 / 1980	10 / 1980	8 / 1980	0 / 1981
Incorrect, Asian American	5 (0.3)	2 (0.1)	2 (0.1)	4 (0.2)	11 (0.6)
False Positive / False Negative	4 / 1	1 / 1	1 / 1	1 / 3	0 / 11
Correct, Other American	1986 (99.7)	1986 (99.7)	1986 (99.7)	1985 (99.6)	1985 (99.6)
True Positive / True Negative	1 / 1985	1 / 1985	1 / 1985	0 / 1985	0 / 1985
Incorrect, Other American	6 (0.3)	6 (0.3)	6 (0.3)	7 (0.4)	7 (0.4)
False Positive / False Negative	0 / 6	0 / 6	0 / 6	0 / 7	0 / 7

Figure A7: Percentage Correctly Identified by Group



A2.1 Sample of African-American Lobbyists

In this section, we explore our sample of African-American revolving-door lobbyists, as identified using the Imai and Khanna's (2016) method, further. Using Klarner's (2021) coding, we seek to determine whether Imai and Khanna's method truly improves our ability to identify African-American lobbyists as opposed to randomly drawing names from our list of all revolvers, and whether the characteristics (i.e., clientele size, multi-client advocate status, and woman status) of non-black lobbyists identified as black (under Imai and Khanna) are statistically indifferent from those of non-black lobbyists identified as non-black. If the assumptions supported by our data, then estimating effect sizes using regression analysis and Imai and Khanna's predictions for African-American lobbyists produces merely weaker estimates of effect sizes.

In Table A4, we present the results of difference-of-means tests. Again, we assume that Klarner's coding of lobbyists is the most reliable. In the first column, we present a number of characteristics based on Klarner's coding. For example: about 12 percent of the lobbyists

Table A4: Comparison of Lobbyist Samples

	Imai and Khanna: African American	*Imai and Khanna*: Not African American	Difference
Percent Actual Black	11.86	1.96	9.9***
Average Clientele, Non-Black	5.08	6.08	1
Percent Multi-Client, Non-Black	55.77	52.56	3.21
Percent Women, Non-Black	7.69	7.45	0.24

*p<0.1; **p<0.05; ***p<0.01 on two-tailed tests.

with a 60-percent chance or greater of being black, according to Imai and Khanna, were actually black according to Klarner. This percentage is much lower (around two) for lobbyists whom Imai and Khanna's method would not classify as black. This difference is statistically discernible. For lobbyists who are not black, the Imai and Khanna method does not differentiate in terms of clientele sizes, multi-client status, or womanhood. More concretely, non-black lobbyists that were mistakenly coded as black by Imai and Khanna's method represented an average of 5.08 clients, whereas non-black lobbyists that were accurately coded as non-black by the method represented an average of 6.08 clients. Given the sample size of roughly 1,900 revolvers, these numbers are statistically indistinguishable.

Hence, the Imai and Khanna method does help improve our ability to identify African-American lobbyists, and the non-black lobbyists incorrectly identified as black are not statistically different from those correctly identified as non-black.

A3 Alternative Model Specifications

In Table A5, we re-estimate the models presented in Table 4 in the main text by excluding numbers of coethnic revolving-door lobbyists from the model specifications. We report these results to show that numbers of legislators and contracts represented by coethnic lobbyists are correlated strongly in the absence of any effects of the revolving door. Otherwise, the

model specification remains unchanged: with fixed effects being estimated but not reported for states and observations waves in all models. We use the same 60-percent threshold for identifying African-American, Hispanic or Latino, and Asian-American lobbyists as used for models in the main text. The first two models have somewhat less explanatory power, as expected.

Table A5: Lobby Contracts by Nonwhite Lobbyists (State Data)

	African American Lobbyists	Hispanic or Latino Lobbyists	Asian American Lobbyists
Coethnic Incumbents	3.452***	5.192***	7.107***
	(0.941)	(1.443)	(1.166)
Coethnic Population	9.223	43.709***	-5.406
	(25.957)	(5.875)	(3.364)
Electorate Liberalism	-2.145***	0.259	-0.114
	(0.630)	(0.593)	(0.141)
Total Contracts	6.487***	17.863***	9.206***
	(1.657)	(1.724)	(0.408)
Constant	68.128**	-3.300	2.025
	(34.243)	(28.886)	(6.838)
Observations	147	147	147
F statistic	5.08	17.62	26.85
R^2	0.754	0.914	0.942

Notes: standard errors in parentheses. State and period effects included in all models but not reported.
$^{*}p<0.1$; $^{*}p<0.05$; $^{**}p<0.01$ on two-tailed tests.

In Table A6, we report the full results of the additional models that test for tenure and partisanship effects, described in the main text.

Table A6: Lobby Contracts by Nonwhite Lobbyists (State Data)

	African American Lobbyists	Hispanic or Latino Lobbyists	Asian American Lobbyists	African American Lobbyists	Hispanic or Latino Lobbyists	Asian American Lobbyists
Coethnic Incumbents	2.254	2.107	-0.240	1.000	-3.152	5.198***
	(1.506)	(2.531)	(2.020)	(1.153)	(2.233)	(1.234)
Coethnic Revolvers	32.135***	32.709***	21.753*	30.189***	44.342***	25.013**
	(5.256)	(6.101)	(11.397)	(5.083)	(7.349)	(11.158)
Coethnic Population	36.933*	36.642***	5.414	34.847	42.898***	-0.857
	(21.513)	(5.726)	(4.030)	(23.955)	(5.522)	(3.383)
Electorate Liberalism	-1.800***	0.187	-0.075	-1.607***	0.039	-0.129
	(0.5379	(0.522)	(0.131)	(0.559)	(0.511)	(0.128)
Total Contracts	7.546***	18.253***	8.956***	7.505***	18.163***	9.162***
	(1.397)	(1.510)	(0.390)	(1.473)	(1.475)	(0.366)
Average Tenure	2.725**	-0.950	1.039	-	-	-
	(1.219)	(1.503)	(0.709)			
Tenure * Coethnic Incumbents	-0.189	-0.041	0.811***	-	-	-
	(0.117)	(0.197)	(0.200)			
Democratic Control	-	-	-	13.751	-24.455	13.775***
				(17.878)	(14.980)	(3.405)
Control * Coethnic Incumbents	-	-	-	-1.257	4.717***	-2.118***
				(1.051)	(1.794)	(0.634)
Constant	10.727	-4.413	1.523	27.540	18.247	-7.357
	(30.072)	(25.141)	(6.278)	(35.192)	(26.952)	(6.607)
Observations	147	147	147	144	144	144
F statistic	7.89	22.71	30.66	7.48	24.42	32.89
R^2	0.839	0.937	0.953	0.832	0.942	0.956

Notes: standard errors in parentheses. State and period effects included in all models but not reported. $^{*}p<0.1$; $^{*}p<0.05$; $^{**}p<0.01$ on two-tailed tests.

A4 Alternative Identification Thresholds

Since the method introduced by Imai and Khanna (2016) does not identify the ethnic or racial identities of lobbyists perfectly, we re-estimate our models using different thresholds for identifying African-American, Hispanic or Latino, and Asian-American lobbyists. Whereas in the main text, all model results assumed that lobbyists with a 60-percent chance or greater of being nonwhite were, in fact, nonwhite, we here re-estimate those models using the 50-percent and 70-percent thresholds. The model specifications all remain the same, with fixed effects being included for states and observation waves. We begin by re-estimating models that predict the number of ethnic or racial identity groups that each lobbyists represented. We present coefficient plots for these models, which are based on models presented in table three in the main text. (The earlier models that estimate group numbers do not rely on an arbitrary threshold for identifying nonwhite lobbyists.)

Figures A8, A9, and A10 report coefficient plots for the models estimated in table three of the main text, but for different cut points for identifying the ethnicities or races of lobbyists. Each dot represents a coefficient or predicted number of identity-based interests represented by lobbyists in each category. The whiskers represent 95-percent confidence intervals. The coefficients for revolver status, woman status, and clientele size are not reported since those do not vary in any meaningful way across the different identity cut points we use. The coefficients for the 60-percent cut point are the same as those reported in table three in the main text. From Figure A6, we find that black lobbyists are more likely to represent black identity interests than all other lobbyists regardless of the cut point we use. Hispanic or Latino and Asian-American lobbyists are no more or less likely to represent these interests than all other lobbyists (who are mostly white such that these coefficients do not have negative values). From the other two figures, similar trends emerge; although there is a possibility that African-American lobbyists also represent Asian identity groups whenever we use the 50-percent threshold for identification.

Figures A11, A12, and A13 presents the results (as coefficient plots) of models that predict how many contracts are represented by nonwhite lobbyists in the states. These results are also based on different identification thresholds for lobbyists, with those calculated with the 60-percent threshold being originally presented in table four of the main text. From Figure A4, we find that increases in the percent of legislators who are black were correlated with increases in numbers of clients represented by black lobbyists when examined lobbyists with 50-percent chances or greater, and 70-percent chances or greater, of being blacked. For simplicity, the coefficients for all the remaining variables (i.e., total contracts in the state, coethnic population, numbers of coethnic revolvers, electorate liberalism, and fixed effects for states and observations waves) in the model are excluded from the plot. The plot suggests that the 60-percent threshold produces the most conservative results for our narrative. With regard to the clienteles of Latino lobbyists, two of the three thresholds examined in Figure A5 are not discernibly correlated with incumbents. Results are more consistent for Asian-American lobbyists: they came to represent more clients as more Asian Americans were elected to state legislatures, regardless of the threshold level used for identification purposes.

Figure A8: Representatives of Black Interests (Lobbyist Data)

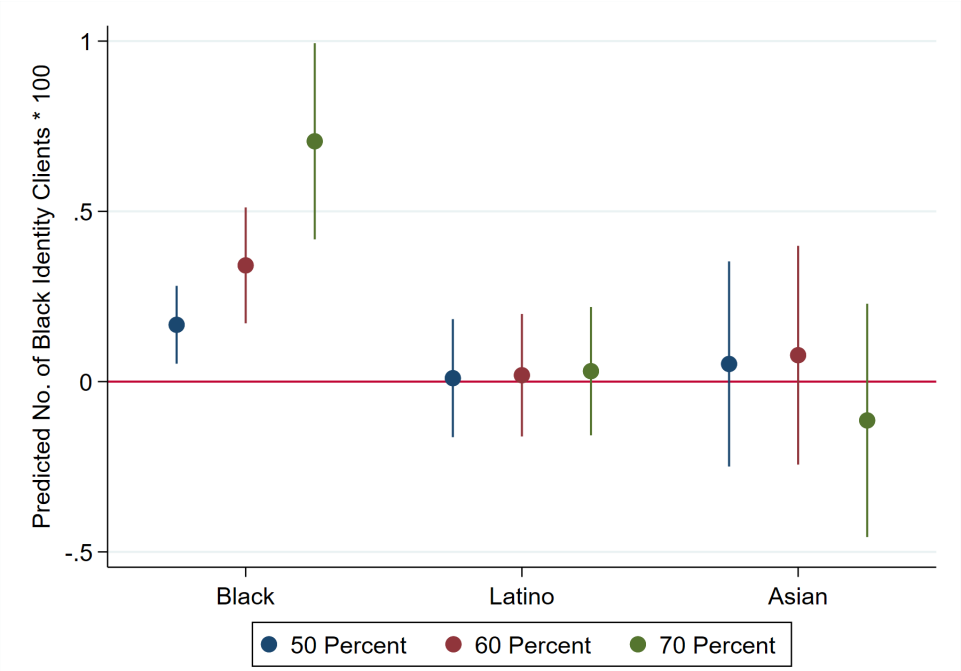


Figure A9: Representatives of Latino Interests (Lobbyist Data)

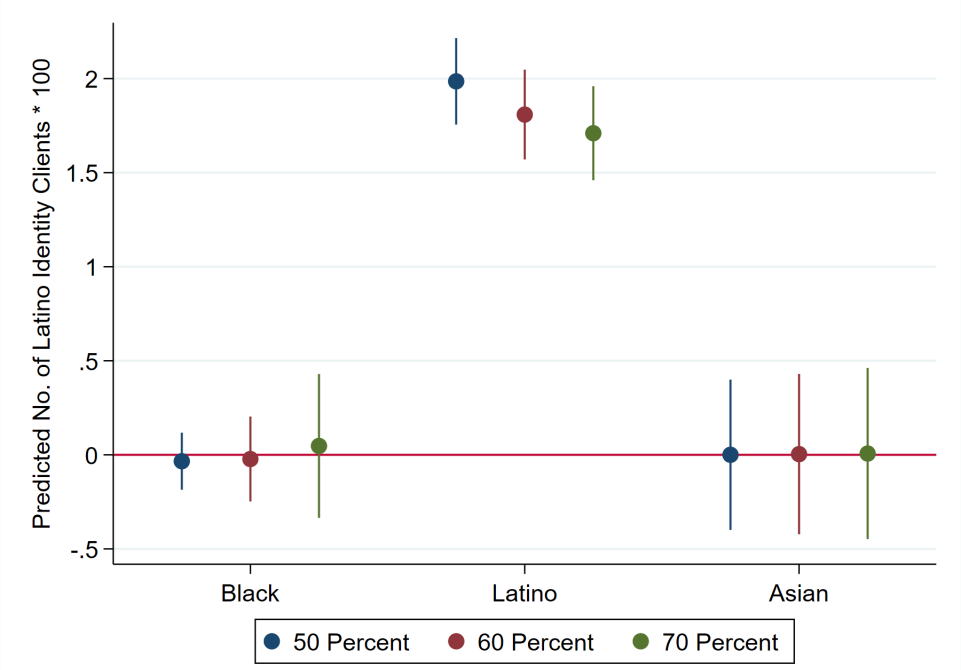


Figure A10: Representatives of Asian Interests (Lobbyist Data)

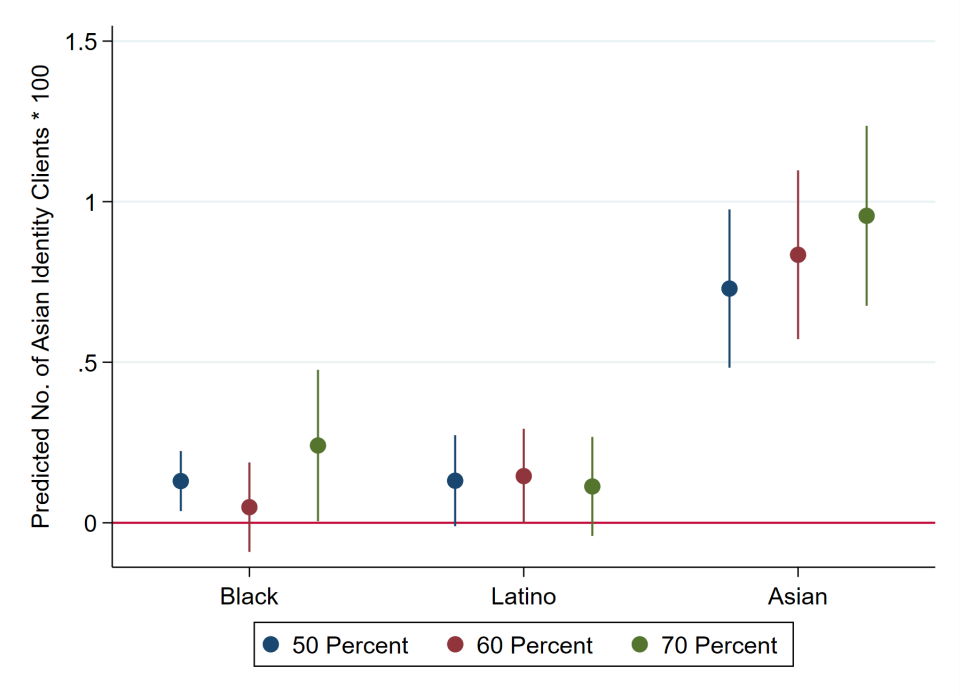


Figure A11: Black Legislators and Lobbyists' Clienteles (State Data)

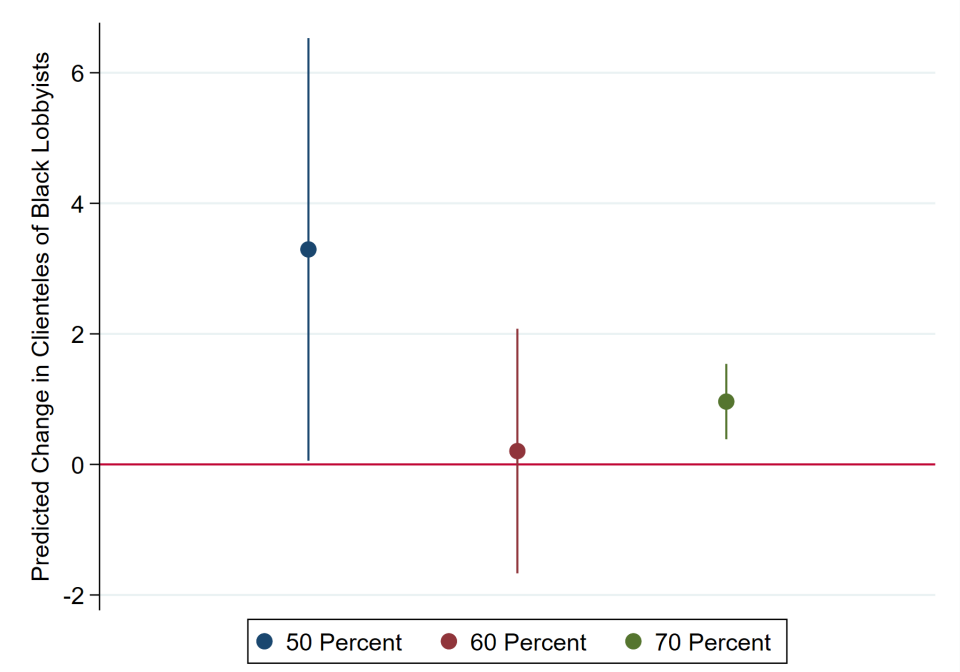


Figure A12: Latino Legislators and Lobbyists' Clienteles (State Data)

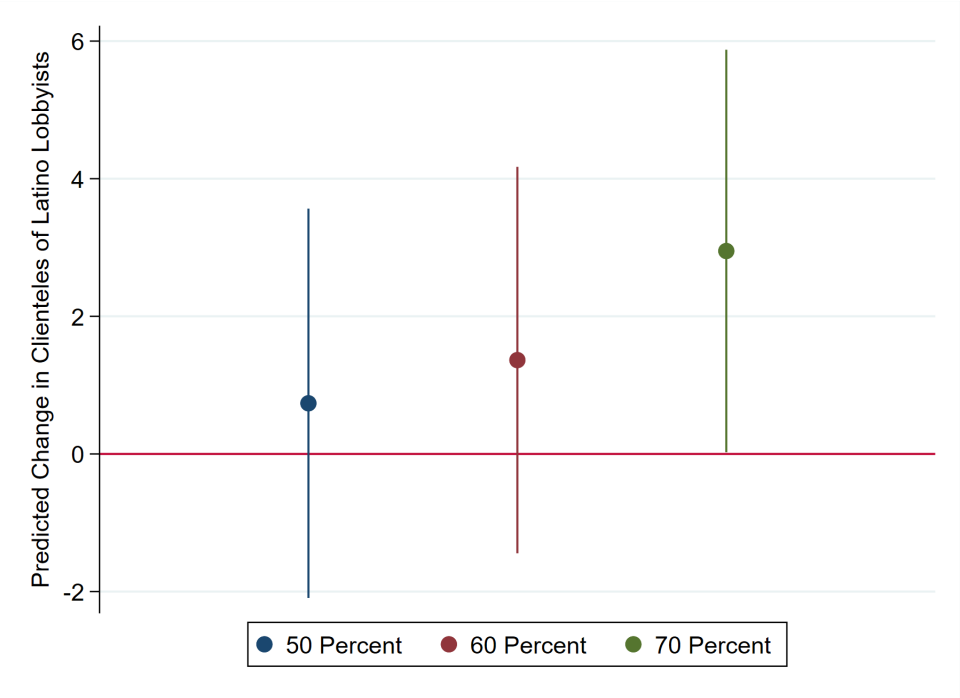
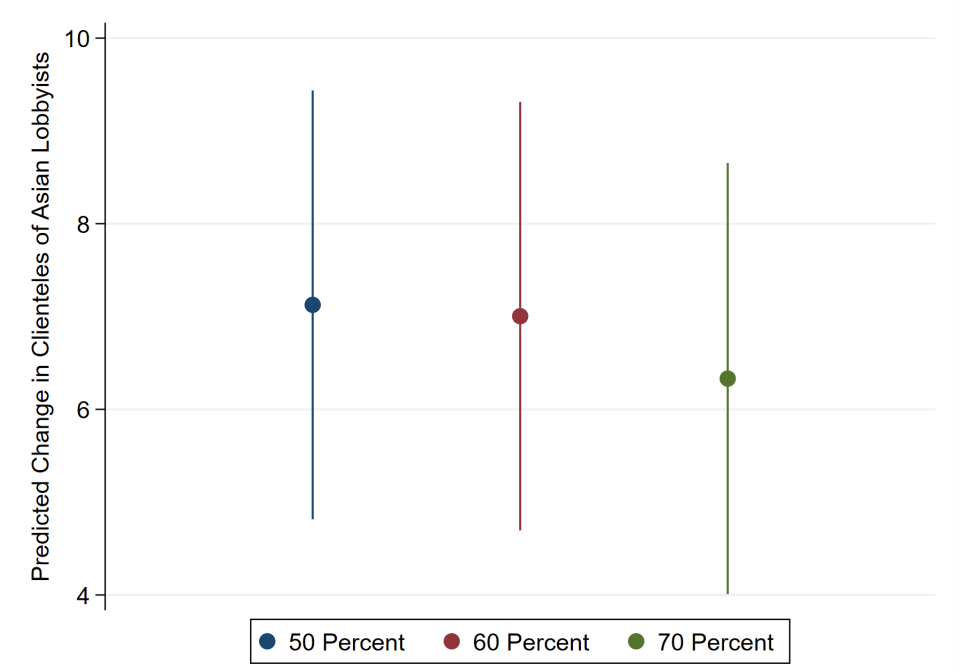


Figure A13: Asian Legislators and Lobbyists' Clienteles (State Data)



A5 References

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