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**Online Supplement**

Distinct but Proximate: The Residential Segregation of Black Americans by Nativity

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## Sample, Weighting, and Reliability

Three decisions shape every estimate in the paper: which metropolitan areas enter the sample, how those areas are weighted when their indices are averaged, and how much confidence the underlying counts can bear. None of the three has a self-evidently correct answer, and each moves the estimates. This supplement reports the full sensitivity of the results to all three.

### The count floor selects a target population, not a reliability threshold

The primary sample includes every metropolitan area with at least one hundred foreign-born Black residents. This threshold is low by the standards of the segregation literature, and the choice is deliberate. Bias-corrected dissimilarity behaves smoothly at low counts—the correction does not break down and produce erratic values in small areas—so a count floor does not function as a measurement-reliability device. It functions as a definition of the population under study. A high floor restricts the analysis to established gateways; a low floor admits the emerging destinations into which the foreign-born Black population has been dispersing. Because that dispersal is one of the phenomena the paper is about, we set the floor at the point where an index becomes degenerate rather than at the point where it becomes precise.

Table A1 reports the consequences across six thresholds, from the primary floor of one hundred to a restrictive floor of ten thousand that retains thirty-nine metropolitan areas in 2010 and fifty-one in 2020. We report the native- and foreign-born dissimilarity terms separately rather than the gap alone, because the gap by itself conceals what a rising floor actually does.

What a rising floor ultimately does is select metropolitan areas where *both* populations are more segregated from Whites. Across the full ladder in 2020, native-born dissimilarity rises from 0.511 to 0.575 and foreign-born dissimilarity from 0.592 to 0.638—increases of 0.064 and 0.046, of broadly similar magnitude. The gap between them is correspondingly stable, moving from +0.081 at the primary floor to +0.063 at the most restrictive, with a mid-ladder peak of +0.098. The 2020 evenness gap is thus not an artifact of including small metropolitan areas; it is present, and of similar magnitude, whether the sample comprises 334 areas or 51.

The 2010 ladder behaves differently, and we report the difference rather than average it away. There the native-born term rises faster than the foreign-born term, so the gap—already near zero at the primary floor, at +0.003—compresses further and crosses into slightly negative territory on the most restrictive samples, reaching −0.019 at a floor of ten thousand. We do not read this as evidence that foreign-born residents were *less* unevenly distributed from Whites in 2010, but

rather that the 2010 evenness gap is not distinguishable from zero in any substantively meaningful way. The paper's substantive claim about 2010 evenness—that there is essentially no difference to interpret—holds.

Intra-Black dissimilarity declines monotonically across the ladder in both years, from 0.552 to 0.481 in 2010 and from 0.542 to 0.460 in 2020. The decline is real and worth stating plainly: native- and foreign-born Black populations are somewhat less residentially distinct from one another in the largest immigrant destinations than in the metropolitan distribution as a whole. But the quantity remains between 0.46 and 0.55 at every threshold, well within the range conventionally described as moderate-to-high, and its sign and interpretation never change.

**Weighting is an estimand choice with consequences**

Averaging metropolitan indices requires a weight, and the two natural choices answer different questions. Metro-weighting treats each metropolitan area as one instance of a receiving context, which follows the new-immigrant-destinations literature in making the locale and its institutions the unit of theory. Population-weighting treats the estimand as a property of people rather than places, describing the experience of the average resident. We adopt metro-weighting as primary for the reason above, and report both in Table A2. Under population-weighting we weight each population's index by that population's own metropolitan counts, so that the gap compares the average native-born resident's dissimilarity with the average foreign-born resident's. Weighting both terms by the total Black population instead holds the weight constant across the two terms, which yields different values; the table's note reports them.

Because the foreign-born Black population is far more geographically concentrated than the native-born—six metropolitan areas hold half of it, against seventeen for the native-born Black population—the two weightings can diverge substantially, and the choice is consequential rather than technical. The divergence is largest for clustering, where the population-weighted gap is more negative than the metro-weighted gap in both years ($-0.210$ against $-0.166$ in 2010; $-0.166$ against $-0.138$ in 2020). This follows from the weights: giving more influence to large metropolitan areas raises clustering relative to Whites for both Black populations but raises native-born clustering considerably more (in 2010, from 0.186 to 0.425, against 0.020 to 0.215 for the foreign-born), so that population-weighting strengthens the paper's central versus-White finding rather than weakening it. The evenness gap moves little: it remains near zero in 2010 ($+0.019$ population-weighted) and is essentially unchanged in 2020 ($+0.077$ against $+0.081$).

In sum, population-weighting leaves the paper's central pattern intact while qualifying one comparison. The two Black populations remain residentially distinct under either weighting: intra-Black dissimilarity is somewhat lower when averaged over residents rather than metropolitan areas (0.508 and 0.487, against 0.552 and 0.542), because the large gateways that dominate a population-weighted average are where the two populations are least distinct, as the count-floor ladder also shows. Their proximity is unaffected, and if anything sharper: intra-Black clustering is essentially unchanged ($SP - 1$ of 0.041 and 0.044), while native-born clustering relative to Whites more than

doubles. What does not carry over is the comparison with the conventional benchmark. Under population-weighting, intra-Black dissimilarity falls below native-born dissimilarity from Whites (0.614 and 0.591), so the statement that the two Black populations are as dissimilar from one another as native-born Black residents are from Whites holds for the metropolitan estimand but not for the average resident.

**Precision varies sharply between the two periods**

The threat to inference in this analysis is not small sample sizes but imprecise counts. We therefore also report estimates restricted to metropolitan areas whose foreign-born Black counts meet conventional reliability standards, using the coefficient of variation propagated from tract-level margins of error. Table A3 reports the primary sample alongside three progressively more restrictive subsamples.

The two periods differ substantially in how much this screen removes. In 2020, restricting to areas with a coefficient of variation at or below 0.30 retains 246 of 334 metropolitan areas and 99 percent of the foreign-born Black population. In 2010 the same threshold retains only 88 of 314 areas, though still 94 percent of the population—a reflection of how much less precise the earlier five-year ACS is for this population. The 2010 reliability tier is thus not a mild screen but a severe one, and it selects almost entirely for established gateways.

Two findings hold across every subsample. The versus-White clustering gap is negative throughout and grows in magnitude as precision increases, from $-0.166$ to $-0.261$ in 2010—though the latter rests on forty-three metropolitan areas—and from $-0.138$ to $-0.177$ in 2020. Intra-Black dissimilarity remains between 0.47 and 0.55 throughout. Neither quantity changes sign, and neither depends on the inclusion of imprecisely measured areas.

The versus-White evenness gap behaves as it does in the count-floor ladder, and for the same reason. In 2020 it is stable and positive across all subsamples, at $+0.081$ to $+0.098$. In 2010 it turns slightly negative on the two most restrictive subsamples. The reliability screen and the count floor are not independent tests here: both select out small emerging-destination areas, so both effectively condition on established gateways.

**What varies and what does not**

Across all three exercises the pattern is the same. The two quantities on which the paper's argument rests—intra-Black dissimilarity and the versus-White clustering gap—hold their sign and their interpretation under every sample restriction and both weightings. Intra-Black dissimilarity stays within a narrow band, between 0.46 and 0.55 across every specification in both years. The clustering gap moves more, but only in one direction: it strengthens under the specifications designed to be most demanding, reaching $-0.261$ on the most precisely measured 2010 subsample against $-0.166$ on the full sample.

Where magnitudes shift across the ladders, the shift reflects which metropolitan areas are in the sample rather than noise in the estimates: high floors and reliability screens both select established

gateways, where native-born segregation from Whites is already high. That sensitivity is not a weakness of the estimates but a restatement of the paper's sampling argument—the convenient sample is the biased one.

Table A1: Sensitivity of corrected dissimilarity estimates to the foreign-born count floor.

| | | Versus non-Hispanic White | | | |
|---|---|---|---|---|---|
| Floor | $N$ | Native-born | Foreign-born | Gap | $D_{nf}$ |
| *2010* | | | | | |
| 100 (primary) | 314 | 0.514 | 0.516 | +0.003 | 0.552 |
| 250 | 250 | 0.517 | 0.524 | +0.007 | 0.543 |
| 500 | 192 | 0.528 | 0.530 | +0.002 | 0.532 |
| 1,000 | 142 | 0.545 | 0.536 | −0.009 | 0.523 |
| 2,500 | 91 | 0.569 | 0.546 | −0.022 | 0.512 |
| 10,000 | 39 | 0.583 | 0.564 | −0.019 | 0.481 |
| *2020* | | | | | |
| 100 (primary) | 334 | 0.511 | 0.592 | +0.081 | 0.542 |
| 250 | 282 | 0.510 | 0.604 | +0.093 | 0.533 |
| 500 | 234 | 0.514 | 0.612 | +0.098 | 0.525 |
| 1,000 | 182 | 0.525 | 0.618 | +0.093 | 0.508 |
| 2,500 | 113 | 0.550 | 0.630 | +0.080 | 0.483 |
| 10,000 | 51 | 0.575 | 0.638 | +0.063 | 0.460 |

*Notes:* Corrected, metro-weighted means. The floor is the minimum number of foreign-born Black residents for a metropolitan area to enter the sample. Gap is foreign-minus-native dissimilarity from non-Hispanic Whites; $D_{nf}$ is dissimilarity between the native- and foreign-born Black populations. *Source:* 2010 and 2020 ACS five-year estimates (IPUMS NHGIS).

Table A2: Corrected segregation indices under metropolitan- and population-weighting.

| | 2010 ($N = 314$) | | 2020 ($N = 334$) | |
|---|---|---|---|---|
| Index | Metro | Population[‡] | Metro | Population[‡] |
| *Versus non-Hispanic White* | | | | |
| Evenness ($D$)[†] | | | | |
| Native-born | 0.514 | 0.614 | 0.511 | 0.591 |
| Foreign-born | 0.516 | 0.632 | 0.592 | 0.668 |
| Gap | +0.003 | +0.019 | +0.081 | +0.077 |
| Clustering ($SP - 1$) | | | | |
| Native-born | 0.186 | 0.425 | 0.165 | 0.364 |
| Foreign-born | 0.020 | 0.215 | 0.028 | 0.199 |
| Gap | −0.166 | −0.210 | −0.138 | −0.166 |
| Concentration ($\delta$) | | | | |
| Native-born | 0.781 | 0.780 | 0.787 | 0.771 |
| Foreign-born | 0.765 | 0.813 | 0.826 | 0.832 |
| Gap | −0.015 | +0.033 | +0.039 | +0.061 |
| Centralization ($ACE$) | | | | |
| Native-born | 0.685 | 0.737 | 0.702 | 0.727 |
| Foreign-born | 0.614 | 0.697 | 0.692 | 0.716 |
| Gap | −0.071 | −0.040 | −0.010 | −0.010 |
| Isolation | — | — | — | — |
| *Native- versus foreign-born* | | | | |
| Evenness ($D$)[†] | 0.552 | 0.508 | 0.542 | 0.487 |
| Clustering ($SP - 1$) | 0.049 | 0.041 | 0.041 | 0.044 |

*Notes:* Corrected values. The upper block measures each Black population against non-Hispanic Whites, with the foreign-minus-native gap beneath each pair; the lower block measures the two Black populations against each other. Isolation is uncorrected, as in Table 2 of the article. *Source:* 2010 and 2020 ACS five-year estimates (IPUMS NHGIS). [‡] Each population's index is weighted by its own metropolitan count; native-versus-foreign indices by the combined Black population. Weighting both versus-White terms by the combined Black population yields evenness gaps of −0.038 and +0.050 and clustering gaps of −0.335 and −0.260 (2010 and 2020). [†] Corrected dissimilarity also applies the Cortese–Falk–Cohen finite-population correction.

Table A3: Corrected estimates on the primary sample and on high-reliability subsamples.

| Sample | $N$ | % metros | % FB pop. | $D_{nf}$ | Evenness gap | Clustering gap |
|---|---|---|---|---|---|---|
| *2010* | | | | | | |
| Primary (floor 100) | 314 | 100.0 | 100.0 | 0.552 | +0.003 | −0.166 |
| Floor 500 | 192 | 61.1 | 98.9 | 0.532 | +0.002 | −0.202 |
| $CV \leq 0.30$ | 88 | 28.0 | 94.4 | 0.502 | −0.013 | −0.238 |
| $CV \leq 0.15$ | 43 | 13.7 | 86.9 | 0.473 | −0.015 | −0.261 |
| *2020* | | | | | | |
| Primary (floor 100) | 334 | 100.0 | 100.0 | 0.542 | +0.081 | −0.138 |
| Floor 500 | 234 | 70.1 | 99.3 | 0.525 | +0.098 | −0.149 |
| $CV \leq 0.30$ | 246 | 73.7 | 99.4 | 0.522 | +0.093 | −0.148 |
| $CV \leq 0.15$ | 137 | 41.0 | 96.6 | 0.491 | +0.084 | −0.177 |

*Notes:* $CV$ is the coefficient of variation of the metropolitan foreign-born Black count, propagated from tract margins of error. Percentages are shares of the primary sample's metropolitan areas and foreign-born Black population. Gaps are foreign-minus-native, measured against non-Hispanic Whites; $D_{nf}$ is dissimilarity between the native- and foreign-born Black populations. *Source:* 2010 and 2020 ACS five-year estimates (IPUMS NHGIS).