PAA 2007 - Extended Abstract

Disaggregating Trends in Racial Residential Segregation: Metropolitan, Micropolitan, and Noncore Counties Compared

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Introduction

Most previous research has focused on changing patterns of segregation in metropolitan urbanized areas or central cities. In this paper, we examine sources of change in residential segregation between and within places in U.S. metropolitan and nonmetropolitan areas, including its micropolitan and noncore counties. In 2003, OMB first disaggregated nonmetro counties into micropolitan and noncore counties. Micropolitan areas include counties with an urban cluster of at least 10,000 persons or more becomes the central county of a micro area. Outlying counties are included if they meet certain commuting criteria to the central county. To date, we are unaware of studies that have documented trends in racial segregation in micropolitan and noncore areas outside of America's metropolitan cities.

Background

In this paper, 1990-2000 changes in place segregation are measured using the Theil index, for it can be additively decomposed into contributions of regional, metropolitan, micropolitan, noncore, place, and block segregation. We focus on black-white, Hispanicwhite, and Hispanic-black trends in segregation using data from the Census Bureau's Summary Files. By decomposing segregation, we can determine if individuals tend to cluster within places, between places, or between higher order spatial systems (e.g., metropolitan, micropolitan, or noncore). Our proposed paper builds on the recent paper of Fischer et al. (2004), who decomposed segregation into contributions of regional, metropolitan, center city-suburban, place, and tract segregation. Their work – and ours – shifts the focus from neighborhood segregation to "macro- and place-segregation," while addressing the question of whether any optimism implied by recent declines in neighborhood segregation in cities must be balanced by increases in segregation at other spatial scales. Our study also extends our baseline estimates of recent patterns of racial segregation in small town America (Lichter, Parisi, Grice, and Taquino 2006). Our previous analyses, using block data from the 1990 and 2000 censuses, indicated segregation indices (e.g., D's) in nonmetro places that were remarkably similar to patterns observed in metropolitan cities (see Table 1).

	Black-White		Hispanio	c-White	Native American-White	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
1990						
All	68.21	73.62	45.91	52.30	46.91	46.67
Metro	63.69	73.48	42.75	52.26	45.38	45.14
Nonmetro	73.67	74.77	53.22	53.13	47.46	47.21
2000						
All	62.28	67.76	44.05	51.71	46.60	46.51
Metro	58.70	67.80	41.61	51.81	44.60	45.77
Nonmetro	66.61	67.46	49.68	49.41	47.32	46.78
Percent Change						
All	-8.69	-7.96	-4.05	-1.13	-0.66	-0.34
Metro	-7.83	-7.73	-2.67	-0.86	-1.72	1.40
Nonmetro	-9.58	-9.78	-6.65	-7.00	-0.29	-0.91

 Table 1: Average Segregation in Metropolitan and Nonmetropolitan Places, 1990

 and 2000 (Weighted by Minority Group Size)

By adjusting the spatial lenses of racial segregation research, our study builds on previous work in several important ways. First, the majority of the studies examine segregation using one of the census area units (tract, census block, and block). These studies also primarily focus on examining distributions of racial groups within metro areas. Recent literature on suburbanization suggests that more focus should be given to segregation within and between places as minority groups, especially African Americans, are moving from central cities to suburban places. Furthermore, many places in rural America are becoming a destination for Hispanics. In fact, Hispanics were the fastest growing minority group in rural America during the 1990's. In 2000, there were more than 2 million Hispanics in rural America (see Table 2). When place is the spatial context, blocks are the most logical unit to examine the distribution of racial groups. Furthermore, when the focus is on places, even though a small percentage of the population lives in other geographic areas, micropolitan and non-core areas cannot be ignored as many minorities are concentrated within places.

Table 2. 2000 Topulation in Metro, Micro, and Mon-Metro Areas										
	Metropolitan		Micropolitan		Non-Metropolitan		Total Population			
	Number	%	Number	%	Number	%	•			
Non-Hispanic										
White	153,838,761	79.36	23,845,646	12.30	16,167,488	8.34	193,851,895			
Black	29,791,250	87.86	2,495,740	7.36	1,618,945	4.78	33,905,935			
Amer. Indian	1,131,184	57.43	393,475	19.97	445,180	22.60	1,969,839			
Asian/Pac Isl.	9,584,321	97.34	199,567	2.03	62,278	0.63	9,846,166			
Other	4,297,182	89.20	327,315	6.80	192,838	4.00	4,817,335			
Hispanic	32,591,412	92.61	1,756,627	4.99	844,228	2.40	35,192,267			
Total	231.234.110	82.71	29.018.370	10.38	19.330.957	6.91	279.583.437			

Table 2: 2000 Population in Metro, Micro, and Non-Metro Areas

Second, to our knowledge, there is no nationwide study that uses place as a spatial context to examine segregation even though the importance of place in the study of segregation is highlighted in several studies (Alba and Logan 1991, 1993; Logan and Alba 1993; Logan and Schneider 1984). The most significant contribution of this paper will be to estimate models that examine how variations across geographic systems (metropolitan, micropolitan, and non-core) might contribute to explain variation in spatial segregation within and between places. The dependent variable here will be the H-index within places/H-index between places across geographic systems. Larger values for this index mean more segregation between than within places.

Third, analytically, we provide for the first time national estimates that separate H-index into components that distinguish between individuals that live within and outside place boundaries. For example, for U.S. metro people living within places, H should be calculated based on the sum of all the blocks that fall within places. Similarly, we can calculate H for U.S. metro people living outside places. This can be repeated for the other geographic systems.

Fourth, we estimate regression models to examine factors associated with within spatial segregation across metropolitan, micropolitan, and non-metropolitan areas. We also estimate regression models to examine how differences in spatial, social and economic characteristics contribute to the variation of segregation within and between places across metropolitan, micropolitan, and non-core areas.

Conclusions

This paper provides, for the first time, comparative analyses of segregation indices among places located across the rural-urban continuum. It acknowledges that segregation manifests itself at the system level and that declining segregation at one spatial level (e.g., neighborhoods) may be counterbalanced by growing segregation at another. It also recognizes that the centrifugal drift of America's majority and minority populations from cities to suburbs and beyond is spatially uneven, and that current analyses of racial residential segregation requires – more than ever – a broader spatial lenses. Our study addresses these substantive and analytic challenges, and provides a baseline for future studies of segregation in places outside metropolitan cities.

References

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