



Measuring Local Heterogeneity with 1990 U.S. Census Data

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Abstract:

A sample covering 204,394 blocks from the 1990 U.S. Census permits measurement of residual heterogeneity from local area to local area after controlling by stratification for demographic characteristics such as race, ethnicity, age, sex as well as geographic characteristics such as region and place-type. The local areas have populations on the order of 10,000 people. The variables studied are four indices of enumeration difficulty. The results show that variance due to heterogeneity from area to area is comparable to (if not larger than) variance from stratum to stratum and can be expected to dominate sampling variance - especially with samples as large as the ones used in the U.S. Census Bureau's Post-Enumeration Surveys. These findings constrain the viable estimation strategies that could be employed for local tallies in the U.S. 2000 Census.

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