The Interaction of Individual Preferences and Economic Differentials in the Generation of Racial Segregation: An Agent-Based Model

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Abstract

This paper explores the effect of individual actions and economic differentials on racial segregation using empirically-calibrated agent-based simulations. The basic simulation model is based on Thomas Schelling's spatial proximity model. It features neighborhood preferences about race, and racial segregation emerges as households move to satisfy their preferences. Two variants of the basic model feature neighborhood preferences about income instead of race, and neighborhood preferences about income as well as race. I vary the relationship between household income and race in each simulation, and analyze how the strength of their association and the type of neighborhood preference affect the dynamics of racial segregation. Results show that if preferences are based on race, the association of race and income does not affect racial segregation; if preferences based on income, a stronger association leads to higher racial segregation; and if preferences are based on both race and income, a stronger association leads to lower racial segregation.

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