



HCEO

[hceconomics.org](http://hceconomics.org)

# Conference Summary: Segregation—Measurement, Causes, and Effects

February 2, 2013, University of Chicago  
Report Prepared by Jörn Boehnke

## Introduction

Segregation contributes to inequality, and is sometimes considered a direct proxy for inequality itself. Thus, working to understand segregation is an important part of the mission of the Human Capital and Economic Opportunity Measurement, Interpretation, and Policy (MIP) network.

The “Segregation—Measurement, Causes, and Effects” conference brought together experts in economics, sociology, and geography to discuss the forms, measurement, and impact of segregation. Some researchers at the conference presented theoretical work on different concepts of “segregation” and their associated measurement strategies. Others discussed empirical work on the evolution and effects of school, housing, and income segregation. Cross-field dialog was central, enabling all attendees to learn about each others’ methods, findings, and open questions.

The research shared at the conference provided a rich basis for future work toward understanding segregation, poverty, and social-economic disparity.

## Spatial Segregation

### David Wong

George Mason University

David Wong started his presentation on “Spatial Segregation” by giving a general overview of the existing measures of segregation. According to Wong, most of these methods have been introduced by sociologists trying to understand heterogeneity in population compositions among areas. Wong questioned whether existing measures capture what we mean by “segregation.” He showed hypothetical neighborhood distributions, for which the audience’s views on which distributions looked “more segregated” contradicted the measures in the literature. He concluded by highlighting three shortcomings of current segregation measures:

1. most segregation measures are aspatial,
2. most segregation measure only provide a single number for an entire area / city with lots of distinct regions, and
3. most segregation measure are socio-ecologically based, using census data.

Wong urged “allowing” individuals to cross borders. Instead of just considering individuals within areas, he suggested including populations of neighboring areas, weighted according to proximity. Furthermore, he suggested using travel diary data or similar individual-level data to evaluate segregation. In addition, segregation levels vary across units within a region, and thus segregation for local units should be evaluated. Lastly, Wong argued that segregation does not always result in the denial of access to resources for parts of the population; some forms of segregation may be desirable or necessary in order to help secure peace and safety (e.g., the peace walls in Belfast).

## Networks and Segregation

### Lawrence Blume

Cornell University

Resources: Slides (.pdf)

Lawrence Blume presented on “Networks and Segregation.” He highlighted how Wong’s general question—figuring out what researchers actually want to measure—is important. Showing dot-maps of Chicago, Blume illustrated that even though there is substantial clustering in the racial/ethnic composition in neighborhoods, dif-

ferent income blocks are more intermingled. He suggested that perhaps we might care about the economic outcomes of segregation and not about segregation itself.

Blume continued by characterizing the socio-economic causes of poverty. He divided these into (1) social capital (within-group) and (2) cross-group explanations. The endogeneity of selection in the construction of networks leads to issues in measuring socio-economic relationships. For example, more than half of all first jobs in the United States are acquired through friends and relatives, so that role of connections should not be ignored when modeling personal networks. Blume suggested a game theoretic approach to this complex issue. In Blume’s model, individuals have tastes, beliefs and economic constraints. Social networks can influence people’s tastes through a desire for conformity, as well as their beliefs and resource constraints. In the subsequent discussion, Steven Durlauf, one of the co-organizers, raised the question of whether we should even desire a segregation measure that could be applied uniformly across contexts. He furthermore suggested that segregation does not necessarily lead to inefficiencies, pointing out as an example that having rich neighbors can have negative as well as positive externalities.

## Inequality and Sorting

### Sean Reardon

Stanford University

Resources: Slides (.pdf)

Sean Reardon presented on his research on “Inequality and Sorting” He motivated his model on student-college choices by stating that students sort among colleges with respect to their socio-economic backgrounds. Supporting this argument, he presented data on the non-linear relationship between family income percentiles and admissions into selective colleges. As of now, Reardon’s model incorporates family income, test-score, and college admission data. Differences in test scores are not sufficient to explain the enrollment differences. Reardon suggested other possible factors: high-income students have more information about colleges, apply to more colleges, and maybe even possess different preferences regarding colleges. Colleges, on the other hand, are seeking diversity and revenue through tuition fees.

## Measuring Segregation in a World of Peer Effects

### Sonia Jaffe

Harvard University and Becker Friedman Institute

Resources: Slides (.pdf)

Sonia Jaffe spoke on “Measuring Segregation in a World of Peer Effects.” She proposed a segregation metric based on the idea that individuals may have information or norms that vary by group. If segregation matters because it affects the types of people and information to which individuals are exposed, then a measure of segregation should capture the extent to which individuals are disproportionately exposed to members of certain groups.

Jaffe proposed a metric where one’s exposure to, for example, white individuals depends on both the fraction of one’s friends that are white and the exposure of one’s friends to white people. The “social whiteness” of a person is a weighted average of his friends’ physical whiteness and his friends’ social whiteness. The relative weight depends on how much peer influence decays with each person that it passes through; this may vary with the type of information or influence.

## Keynote Speaker

### Gary Becker

University of Chicago

Resources: Video

Gary Becker gave the keynote address. He started out by elaborating on the question of when segregation may be good. His work finds that segregation can reduce discrimination against minorities. “But why,” asked Becker, “do we not observe complete segregation?” He suggested that resource and capital constraints do not allow minorities to establish a second economy completely separated from the first.

Becker continued by stating conditions under which segregation could be desirable. The first condition is that segregation should be voluntary, i.e., any group can decide to end its segregation. The second condition is that the group has to be big enough to internalize all consequences of the segregation: externalities arising from preferences expanding beyond the group will lead to non-recognized effects of segregation and can therefore harm others. As a third condition, he stressed

the point that prices have to be flexible: the possibility must exist for each group to price its utility/dis-utility of being segregated. If those three conditions hold, Becker argued, the outcome of any allocation (segregated or non-segregated) will be efficient and is therefore desirable. However, he acknowledged that pricing might be less feasible in allocations involving informal connections like friendships.

Becker continued by elaborating on the issue of whether all preferences should always be taken into account. He said that the economic model of forward looking agents cannot be universally applied to all questions of life. He argued in particular that agents might not be able to correctly anticipate future change in preferences regarding controversial topics like gay-marriage. In those cases, as Becker pointed out, standard Pareto analysis does not apply and might not lead to the long-run optimum. He raised the possibility, while recognizing the challenges, of taxing preferences that we think are undesirable or should not be expressed.

Becker closed his keynote by highlighting that there is an important class of cases where the suppression of prices leads to segregation. Introducing prices can help reduce segregation.

## Still separate, but less unequal: The decline in racial neighborhood inequality in America

### Glenn Firebaugh

Pennsylvania State University

Resources: Slides (.pptx)

Glenn Firebaugh presented “Still separate, but less unequal: The decline in racial neighborhood inequality in America.” He started his talk by showing evidence for a dramatic decline in racial neighborhood inequality (income of neighborhood differing by race) in the United States over the last 30 years. However, he explained, in the same time period neighborhood segregation has decreased less.

Firebaugh divided segregation into three categories: Racial segregation, within-race economic segregation, and cross-race economic segregation. The within-race economic segregation denotes the extent to which poor and non-poor individuals of the same race are segregated. The cross-race economic segregation denotes the extent to which poor individuals of one race and non-poor

individuals of another race are segregated. Firebaugh's research suggests that rising neighborhood income segregation (with in race) has contributed to the decline in racial neighborhood inequality.

## **A Women's Place? Spatial Differences in Women's Market and Non-Market Outcomes**

**Kerwin Charles**

University of Chicago

Resources: Slides (.pdf)

Kerwin Charles presented his research on "A Women's Place? Spatial Differences in Women's Market and Non-Market Outcomes." He found that the labor force participation gap between women and men varies widely throughout the United States. It ranges from -.26 for West Virginia to -.12 for Vermont. The variance in wage gaps exists even after controlling for skill differences and industry composition. Charles found that these gaps shrink over time, while the absolute diversity among states stays constant. His research tried to account for the lack of convergence among the gaps. Charles suggested attitudes towards birth, work, and gender roles can explain the lack of convergence.

Charles also found that there is huge cross-state variation in the answers to question like "Do you approve of married women earning money?" He showed that these "sexist beliefs" among males can explain a substantial part of the variation in wage gaps and labor force participation. Females' "sexist beliefs" do not seem to affect their labor force outcomes, but do affect fertility decisions.

## **Tracking and Inequality: Old Findings and New Directions**

**Adam Gamoran**

University of Wisconsin-Madison

Resources: Slides (.ppt)

talked about "Tracking and Inequality: Old Findings and New Directions," focusing on how patterns of students' achievement are affected by their assignment to groups or tracks at different levels of ability or performance. He described the common consensus of the literature that tracking increases inequality. A key reason for this pattern is that instruction is adjusted to the level of the class, with high achievers receiving rigorous instruction while low achievers encounter instruction that

does not challenge them to perform at their best. As a result, high-achieving students tend to learn more when they are assigned to high tracks than similar students in mixed-ability settings, but low achievers tend to learn less.

Gamoran continued by discussing more recent studies that try to address the problems of ability grouping. A few cases of successful mixed-ability teaching have elevated achievement for low-ability students without reducing achievement for high achievers, but it is not clear how far these results will generalize. Other instances have been reported in which teachers used ability grouping to target instruction effectively to all students so that low achievers as well as high achievers benefitted. Gamoran interpreted these findings as suggesting that there are tradeoffs in tracking policies, leaving it up to policymakers to decide what sort of education they wish to implement.

## **Identification Problems in Evaluating the Effects of Segregation on Socioeconomic Outcomes**

**Steven N. Durlauf**

University of Wisconsin-Madison

Resources: Slides (.pdf)

Steven Durlauf gave a presentation on "Identification Problems in Evaluating the Effects of Segregation on Socioeconomic Outcomes." He started with a general overview on statistical tools to analyze segregation and accompanying identification issues. He emphasized that the problem of endogeneity of social structure needs more attention from researchers of all professions. He gave an example of trying to understand whether an individual's behavior is due to social norms or preferences internalized from society. Uncovering the internal forces driving decisions may help researchers to better understand poverty cycles.

In the second part of his presentation, Durlauf introduced a theoretical framework which helps separate these different channels of human behavior, showing conditions under which multiple equilibria exist. He finished his talk by noting that there is something beyond conformity that drives human behavior that researchers have yet to find.