

THE STABILITY OF MIXED INCOME COMMUNITIES

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Income segregation is a visible aspect in American urban areas. Many believe that the presence of isolated populations of the poor in central cities and inner ring suburbs has important effects on residents, including reducing upward mobility. The undesirable side effects of economic sorting underlie policy interest in creating and sustaining mixed-income communities in American metropolitan areas. To varying degrees, federal, state and local governments all attempt to induce greater income mixing in select neighborhoods through regulation and subsidies. While proponents of these efforts assume that if a mixed income neighborhood can be created, the income mixing that is induced will persist, the accuracy of this assertion has never been directly tested.

The *level* of economic segregation in American metropolitan areas offers something of a puzzle. Mixed income neighborhoods exist in all cities, despite the broad pattern of economic segregation. Standard urban economic models predict strict sorting along economic lines (Alonso 1964, Muth 1969, Tiebout 1956), a result that motivated a line of research explaining mixed-income neighborhoods.¹ Taking a cue from studies of racial sorting, the prevailing approach to explaining mixed-income neighborhoods tends to rely on the assumption that residents obtain additional enjoyment or benefits from living in such neighborhoods. Nonetheless, the results from these models are not very robust; often the mixed equilibrium is only one of several equally likely outcomes or occurs only for a relatively small range of parameter values. These studies ignore the fact that the standard models predicting economic segregation describe long-run equilibria while the income-mixing data are derived from cross-sectional snapshots of urban areas in America at a single point in time. A dynamic interpretation of models that predict income segregation implies that mixed income neighborhoods may exist due to transitional factors, but will not be stable in the long run. The fundamental question then becomes: are mixed-income neighborhoods self-sustaining equilibrium outcomes or are they simply observations of transient states, neighborhoods that are in the midst of changing from one income group to another? New research by Krupka (2005) offers the first rigorous attempt to empirically answer this question.

The analysis of mixed-income neighborhood stability presents subtle statistical issues. The standard models of income segregation suggest lengthy periods of transitional mixing. In the standard Alonso/Muth model, people sort by income into homogenous neighborhoods because different income groups value land differently and the market allocates land to valued uses. However, secular trends like population in-migration or uneven growth in income across the population are likely to change the structure of an urban area slowly; neighborhoods will not instantaneously change to accommodate the new income group. Costs of relocation and housing stock adjustment slow this adjustment process down considerably. If this transitional process is at all extensive, census data simply cannot speak to the stability of mixed income neighborhoods.

¹ Miyao (1978), deBartolome (1990), deBartolome and Ross (2003), and Frankel (1998) are representative studies.

Tiebout offers a model of income segregation whereby families sort into jurisdictions in order to maximize their utility derived from the consumption of public services like education, police protection and garbage pick-up. If the demand for these and other public services exhibit strong income effects, people will sort into jurisdictions based on income. However, if public service levels are slow to adjust to demographic changes in the community, it may take a considerable amount of time before indigenous residents realize that non-preferred service levels are not aberrations, but permanent deficiencies in the community. It is only as families realize this transition is irreversible that they will consider a move to a new jurisdiction. The intervening years will likely include long periods of uncertainty as the political process works out which income group “wins” and gets its preferred level of services. During these periods, jurisdictions will exhibit substantial mixing, but this is no sign that the mixing represents a stable situation.

Finally, if we adopt Schelling’s (1969) approach of assuming people have direct preferences for the incomes of their neighbors, income mixing again appears to be unsustainable at the neighborhood level. These income preferences could arise from various sources: neighborhood externalities, or demand effects on the provision of *private* goods and services. This equilibrium, however, is most likely reached *via* a long transitional period whenever demographic or economic change in the metropolitan area as a whole cause neighborhood instability. These transition periods will exhibit large amounts of income mixing, as classes are thrown into neighborhoods together and wait to see which class will become the dominant group in the neighborhood. If these transitions are at all drawn out, cross sectional estimates of mixing will simply not reflect the long-run equilibrium level of mixing, and cannot yield any insights into long run neighborhood stability.

Krupka’s (2005) empirical study of mixed-income stability draws from a private data set that compiles demographic, economic and housing information at the census block group level, and connects census geographies over thirty years. With this data it is possible to use the census block group as the unit of observation to study how neighborhoods change over time. There are three predictions that the models of income segregation make. All of them are interpretations of the idea that income mixing is not a stable equilibrium. The first prediction is that neighborhoods that exhibit large amounts of income mixing will tend to become more homogenous over time. Second, income mixing will be a result of instability in neighborhood demographics. Finally, a mixed income neighborhood, because it is unstable, will tend to have larger changes in demographic mix over the ensuing time period as sorting occurs, and the neighborhood empties out except for a homogenous group.

The study tests these predictions using the standard deviation of income in the neighborhood as a measure of the amount of income mixing. Demographic instability (or change) is measured by the magnitude of the change in neighborhood median income. Several control variables are included in the empirical analysis. The results suggest that neighborhood demographic shocks are indeed a primary predictor of income mixing,

while prior income mixing is a strong predictor of subsequent demographic transitions, just as the standard economic segregation models predict.

The most important result, however, is that the amount of income mixing does indeed decrease over time. All else equal, the most conservative estimates reveal that a typical mixed neighborhood will lose at least 20 *per cent* of its standard deviation in incomes over ten years. This estimate ranges to as much as 70 *per cent* per decade in some cases.

These results are important for two reasons. First, they are consistent with the prevailing view of neighborhood income mixing as a transitional phenomenon. The branch of the economics literature which has struggled to explain mixed-income neighborhoods as stable equilibrium outcomes appears to be on the wrong track.

On the other hand, stable mixed-income communities have been a public policy goal for some time. Local housing agencies, redevelopment authorities and HUD have all offered incentives to developers to induce the development of such communities. The logic of such policies would seem to be that mixed-income communities, while preferred by all, are unprofitable because of some sort of market imperfection.

In the face of these policy initiatives, it is important to understand how and why income mixing occurs. If it is the case that people prefer to live in mixed neighborhoods but real estate markets do not provide them, then the policies encouraging such development will be correcting a market failure. The empirical evidence, however, indicates that this is not the case; whatever households' expressed attitudes about income-mixing *per se*, economic forces shaped by household residence decisions, business location and/or public service provision do not allow extremely mixed neighborhoods to persist.

This is not to say that public policy has no place in encouraging mixed-income neighborhoods. There are justifications for valuing such communities beyond households' preferences. The fact that income mixing within block groups is so substantial (over 60 *per cent* of the total variance in income occurs within block-group boundaries) might give planners hope that sustaining mixed neighborhoods is not impossible. Nonetheless, this empirical research indicates that market forces work against income-mixing so that mixed-income advocates must recognize that maintaining such neighborhoods requires sustained policy over time.

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