Sample Construction and Structure Quality Adjustment Details for:

Within-city Variation in Urban Decline: The Case of Detroit

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I. Sample Construction Details

The city of Detroit currently has a total of 313 census tracts. However, our sample for Detroit consists of only 207 census tracts. We restrict attention to census tracts with boundaries that remained constant or changed only slightly between 1980 and 2009, and with nonmissing tabulated values for median house prices, income, and key demographic variables. We include 10 tracts whose centroid has moved less than 100 meters and whose area has changed by less than a 200 meter by 200 meter area (smaller than a Chicago city block). The census tracts excluded from our sample do not appear to be systematically different along income and demographic variables relative to the census tracts included in our sample. Given this restriction, the total population for the census tracts in our analysis sample for Tables 2, 3, and 4 is less than the total population for the city as a whole.

II. Adjustments for Changes in Structure Quality

In Table 5, Panel B, we adjust for changes in structure quality within census tracts over time. To make this adjustment, we regress housing price growth on the change in the fraction of single family detached housing units, the change in the fraction of studio and one bedroom units, the change in the fraction of two bedroom units, the change in the fraction of 3 bedroom units, the change in the fraction of units built in the past 5 years, the change in the fraction of units built 5–20 years ago, and the change in the fraction of units built 20–40 years ago. We then add the constant from this regression to the residuals, thus zeroing out changes in structure quality. In Guerrieri, Hartley, and Hurst (2011), we show that the hedonically adjusted housing price growth at the zip code level is highly correlated with the corresponding zip code level repeat sales price indices from Case–Shiller when the samples overlap.

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