The effects of the Great Recession on individuals and workers are well studied. Many reports document how and why individuals became more likely to be unemployed, to be in poverty, or to face foreclosure.

But how have neighborhoods fared during the Great Recession? Although most research has focused on individual-level outcomes, many of the conventional narratives about the Great Recession are in fact neighborhood-level narratives. In discussing the housing crisis, for example, we don’t just focus on individuals facing foreclosure but on entire neighborhoods that were hard hit by the housing crisis, where one can find house after house on the same streets all in foreclosure. Likewise, the unemployment crisis is often understood to be spatially clustered, with areas that depend disproportionately on construction, manufacturing, and other heavily-affected industries typically presumed to be especially hard hit.

These narratives suggest a country increasingly divided into advantaged and disadvantaged communities for decades and generations to come.

KEY FINDINGS

- Poverty, vacancy, and unemployment rates increased in most communities during the Great Recession.
- However, these increases were not borne equally across communities. Communities that were disadvantaged before the recession experienced larger increases in poverty, vacancy, and particularly unemployment rates.
- Communities with greater concentrations of minority and immigrant residents were also particularly hard hit by the recession, with the largest increases in unemployment occurring in these neighborhoods.
- Over a short time period, the Great Recession intensified inequality among neighborhoods, which has implications for the residents of disadvantaged communities for decades and generations to come.

But we simply don’t know if the Great Recession has indeed had this inequality-increasing effect at the neighborhood level. This brief thus poses these neighborhood-level questions: To what extent have the impacts of the recession been spatially concentrated? Has this been a recession in which all communities have suffered roughly equally? Or has the pain been especially borne by some communities? In answering these questions, we pay particular attention to how communities that were disadvantaged before the recession fared during the recession, asking whether historically poor communities were especially hard hit.

**Monitoring the Rise of Neighborhood Inequality**

These questions can be addressed by comparing the same neighborhoods before and after the recession on key indicators. First, it’s useful to distinguish between three possible scenarios of how the pain of the recession is (or is not) equally shared, all illustrated in Figure 1.

**Equal-sharing outcome:** In the first scenario (blue dots), the equal-sharing outcome, rates of unemployment, poverty, or housing vacancy, increase by the same amount in each community. For example, if the recession affected community-level unemployment rates equally, unemployment would increase by roughly the same amount, say one point, in each community. Figure 1 shows that a community with
1% unemployment prior to the recession (x-axis) would have a post-recession unemployment rate of 2% (y-axis). A neighborhood with 5% pre-recession unemployment has a post-recession unemployment rate of 6%. Therefore, while the most-disadvantaged communities remain so, the absolute differences between the most- and least-disadvantaged communities remain the same before and after the recession (here, 4 percentage points). This type of recession effect does not reduce inequality, but preserves the inter-community differences that prevailed before the recession.

**Moderate inequality-increasing:** The second scenario (red dots) operates multiplicatively. Neighborhoods with higher initial rates of, for example, unemployment, experience larger increases in the unemployment rate. Figure 1 presents a scenario in which the unemployment rate increases by a factor of 1.5 (with an additive increase of 1 point, so \( y = 1 + 1.5x \)).

For example, a neighborhood with 1% unemployment pre-recession would have a post-recession unemployment rate of 2.5% while a neighborhood with 5% pre-recession unemployment would have a post-recession unemployment rate of 8.5%. Therefore, the absolute difference between high- and low-unemployment communities would grow (here, from 4 to 6 points), and inequality would increase. The recession appears to have operated in this type of multiplicative fashion for other phenomena with the most disadvantaged groups bearing the brunt of the recession’s impacts (see http://www.recessiontrends.org for details.).

**Strong inequality-increasing:** The final scenario in Figure 1 (green dots) differs from the previous one only due to its larger multiplicative factor (the slope is 2.5 rather than 1.5). When the multiplicative factor is very large, there’s an especially large penalty borne by communities with high baseline rates.

In this brief, we investigate how strongly a community’s initial level of disadvantage determines the recession’s impact. In Figure 1, each dot representing a neighborhood is very close to the fitted line, representing scenarios in which a neighborhood’s initial level of disadvantage strongly dictates its outcome during the recession. If the relationship between initial conditions and the impact of the recession is not as strong (if the dots along the line were scattered more widely), it suggests that other variables influence which communities suffered most during the recession.

We examine how communities fared both in terms of the magnitude of the relationship between pre- and post-recession conditions (the slope of the line) and how precisely pre-recession conditions predict the impact of the recession (the degree of scatter around the line). The magnitude of the relationship reveals the extent to which the recession is inequality-increasing, with a slope over 1 indicating that poor communities bear more of the brunt than rich communities. The precision of the relationship indexes the role of neighborhood characteristics aside from initial disadvantage in determining a community’s fate.

We examine community-level poverty, unemployment, and vacancy rates before and after the onset of the Great Recession in late 2007 and the economic collapse in the fall of 2008. Our results show that the economic well-being of communities, important contexts for individual economic, social, and physical well-being, declined during the economic downturn in uneven ways. Just as we now know that the Great Recession operated to make the rich richer and the poor poorer, we show here that the Great Recession also led to increasing inequality at the neighborhood level.
Data and Procedures

Our analyses are constrained by how the government collects census data for the nation. Past research often defines neighborhoods using the census tract, an administratively defined unit of about 4,000 residents on average. The most recent census data on tract-level economic characteristics come from the American Community Survey (ACS) aggregated across the 5-year period from 2007-2011. This is a problem for studying the recession because the available data combine years before and after the recession began.

Because we wish to explore the effects of the Great Recession, we must therefore define neighborhoods in a different way. Our solution is to examine another Census-defined statistical area—Public Use Microdata Areas (PUMAs). PUMAs are geographically contiguous areas with at least 100,000 residents. Although PUMAs are clearly larger than the census tracts or zip codes (average population of 30,000) used in past research, they delineate all places in the U.S. into smaller geographic areas that are proxies for what we can think of as “local communities.” We compare 3-year estimates from the ACS that aggregate data from 2005 to 2007 (defined as pre-recession) with the latest 3-year ACS estimates currently available, from 2009 to 2011 (defined as post-recession).

We first present national estimates. Then, as we know that there is a great deal of variation in community patterns within cities, we also present results for the three largest cities in the U.S.—New York, Los Angeles, and Chicago. Focusing on particular cities allows us to explore some of the factors other than a community’s initial disadvantage that shaped how it fared during the recession. Taken in combination, our brief thus presents a national, big-city, and local perspective on community experiences in the Great Recession.

Community-Level Patterns

We begin with simple descriptive maps (see Figure 2) of the spatial distribution of changes in community well-being and then turn to a more formal discussion of the trends in inequality (see Figure 3). Figure 2 presents changes in poverty, unemployment, and vacancy rates for all PUMAs in the U.S. from 2005-07 to 2009-11. Given the role of the foreclosure crisis in this recession, the vacancy rate provides an important indicator of community well-being in terms of the physical and social state of the neighborhood in addition to the characteristics of its residents. High vacancy rates are associated with increased crime rates and decreased rates of neighborhood cohesion and residential stability, which influence community-level economic and social changes.

When we compare the pre-recession and post-recession periods, we find that the poverty rate (top) increased in 84% of PUMAs (red and yellow shaded areas), the vacancy rate (middle) increased in 74% of PUMAs, and the unemployment rate (bottom) increased in 97% of PUMAs. On average, the changes were modest—about a 2 percentage point increase for poverty rates, 1 percentage point for vacancy rates and, perhaps most troubling, nearly 4 percentage points for unemployment. The simple conclusion: In most communities, community-level economic well-being has clearly declined alongside families’ and individuals’ economic hardships, all in a relatively short time.

That the maps display recession-induced decline is hardly surprising. We are more interested in the spatial distribution of that decline. Were there any protected pockets? We find that PUMAs in the middle of the country, from Texas to North Dakota, typically fared better, as evidenced by the relative prevalence of areas shaded green in the poverty and vacancy maps (indicating declines). Communities in Michigan, Florida, and several Western states fared particularly poorly in the recession, and these are areas where foreclosures were concentrated as well (though sparsely populated states have few PUMAs, masking declines within them). When it comes to unemployment, however, there’s less green in the “protected” midsection of the country, suggesting that labor market problems were widely shared and came closer to being a true across-the-board experience.

These maps tell us about the regional distribution of the recession’s effects. We turn next to the question of whether disadvantaged PUMAs were hardest hit and thus became even more disadvantaged relative to advantaged PUMAs.

Figure 3 presents scatterplots comparing poverty, vacancy, and unemployment rates in 2005-07 (on the x-axis) and in 2009-11 (on the y-axis). The first and very important conclusion: These plots reveal striking persistence in community-level inequality throughout the recession—PUMAs with the lowest economic profiles in 2005-07 remain at the bottom in 2009-11, while the well-off communities remain at the top.

But has inequality increased? The reference line in each scatterplot has a slope of 1, representing the “equal sharing” scenario of Figure 1. Departures from this line reveal if recession effects have increased inequality. If the equal-sharing process played out, dots would fall into a line with a slope of one that had been shifted on the y-axis by an equal amount for all communities. Instead, we find that the slopes for
FIGURE 2. Poverty, Vacancy, and Unemployment Rates Before and After the Great Recession

Change in Poverty Rate, 2005–07 to 2009–11

Change in Vacancy Rate, 2005–07 to 2009–11

Change in Unemployment Rate, 2005–07 to 2009–11
poverty, unemployment, and housing vacancies are all slightly larger than one. For didactic purposes, Figure 1 presents the possibility of extremely steep slopes, but it’s unlikely that a single recession, even a very extreme one, could generate such a precipitous increase in neighborhood-level inequality.

We find that poverty rates increased by a multiplicative factor of 1.004. Therefore, poverty rate increases are borne fairly equally across communities during the recession, though they increased slightly more during the recession in neighborhoods with higher pre-recession poverty rates. Vacancy rates increased multiplicatively by a factor of 1.04, indicating a slight inequality-increasing effect of the recession. The vacancy rate increased by 0.04 points more for every additional point in a community’s pre-recession vacancy rate.

The unemployment scatterplot departs most strikingly from the reference line, indicating the strongest inequality-increasing effects of the recession. Unemployment increased by a factor of 1.10 during the recession. While Figure 2 showed widespread increases in unemployment across the U.S., the magnitude of the increases was higher in places that initially had high unemployment rates, increasing inequality. Neighborhoods with 1% unemployment prior to the recession have 1.1% unemployment post-recession, while neighborhoods with 10% unemployment pre-recession have 11% unemployment post-recession, increasing the absolute difference between the two neighborhoods by nearly 1 point. The inequality-increasing impact on unemployment likely arises because the industries that were especially hard hit by the Great Recession, such as manufacturing, were typically industries that have long been in trouble. In effect, the Great Recession accelerated a deindustrialization process that was already underway, with the implication that manufacturing-intensive PUMAs, which had preexisting high unemployment rates, experienced disproportionate increases in unemployment.

As is evident in Figure 3, there is some scatter around these lines, particularly for unemployment—they are not perfectly straight. This suggests that factors besides initial poverty, vacancy, and unemployment rates shaped the recession’s effect on these characteristics. What were these other factors? In exploratory analyses, we found that (a) increases in poverty, vacancy, and unemployment rates from 2005-07 to 2009-11 were higher in communities with higher initial proportions of Hispanic and black residents, and (b) unemployment rates increased more in communities with higher initial proportions of immigrants. These results imply that the scatter in Figure 3 arises in part because communities with Hispanics, blacks, or immigrants suffered disproportionately even when those com-
Community Well-Being and the Great Recession

Communities didn’t have especially high poverty, unemployment, or vacancy rates. We explore this further in the next section.

Overall, we conclude that the recession did increase inequality among neighborhoods, particularly with respect to unemployment. PUMAs with high poverty, unemployment, and vacancy rates before the recession pulled away during the recession and became even more disadvantaged in absolute terms in just a few short years. That minority and immigrant communities were particularly affected demonstrates that the recession has also exacerbated long-standing economic and racial inequalities.

Unemployment in Big-City Communities during the Great Recession

Our national results describe an overall trend of growing community inequality during the recession. We now turn to the “big three” of U.S. cities—New York, Los Angeles, and Chicago—to explore how the recession influenced unemployment within these cities. We focus on unemployment because the recession’s inequality-increasing effect was largest for unemployment and because pre- and post-recession unemployment rates were most scattered around the trend line, suggesting that other characteristics, like minority and immigrant composition, also determined which communities were hardest hit by the recession.

Figure 4 presents the change in unemployment rates from 2005-07 to 2009-11, shaded as in Figure 2, for PUMAs in the New York (left), Los Angeles (middle), and Chicago (right) metropolitan areas. PUMAs where more than 50% of the population was black or Hispanic prior to the recession (majority-minority communities) are identified with black triangles. Minority areas on average tend to have higher levels of poverty and unemployment than white communities—the question here is whether the Great Recession exacerbated this inequality.

Starting with New York, Figure 4 shows that of the 8 PUMAs with large increases in unemployment rates (shaded in red), 5 were majority-minority communities prior to the recession. The relationship between community racial composition and the impact of the recession is stronger in Los Angeles, which had the most majority-minority communities—41 of 66 total PUMAs. In 22 of these 41 PUMAs, the unemployment rate increased by over 5 points. Of the 29 PUMAs with large increases in unemployment rates, 76% were majority-minority communities.

The pattern holds in Chicago: of the 16 PUMAs with large increases in unemployment rates, 10 were majority-minority. Unemployment increased in every PUMA in Chicago, but most strikingly in the historically disadvantaged “black belt” on the city’s south side, emphasizing that the recession’s impact on unemployment is unequally distributed by race. The case of Chicago is especially revealing because evidence from smaller “community areas” is also available. Chicago has 77 community areas (compared to just 19 PUMAs) with an average population of 37,000. When community areas are analyzed, Sampson (2012: 405) finds that community areas with the highest levels of concentrated disadvantage in 2000 had the highest foreclosure rates during the recession. This further emphasizes our main result: on average, historically disadvantaged neighborhoods experienced a disproportionate deterioration in their conditions during the recession.

Communities, Inequality, and the Great Recession

The story of the Great Recession has largely been told in individual terms. Important research documents the burgeoning numbers of long-term unemployed, the rising poverty rate, and the growing number of homeowners facing foreclosures.

The purpose of this brief has been to turn our attention to how neighborhoods fared. To what extent has the Great Recession hit already-disadvantaged neighborhoods especially hard and thus increased neighborhood-level inequality?

Our analyses show that communities, like families and individuals, have suffered economic hardships during the Great Recession and that these hardships were distributed unequally. Many of the nation’s most vulnerable communities have borne the brunt of the economic crisis, as poverty, vacancy rates, and particularly unemployment rates increased more in disadvantaged and minority neighborhoods. Focusing on the three largest cities in the U.S. confirmed that majority-minority communities were among those hardest hit during the recession. The simple result is a growing divide between the have and have-not communities.
Should we care? Yes. The large body of social science research on the importance of neighborhoods as a social context means that increased economic disadvantage in disadvantaged neighborhoods will further reduce the well-being of poor families and individuals. Beyond its direct effects on individuals, the Great Recession has shaped the economic contexts where Americans live and perpetuated and deepened community inequality, potentially leading to further negative impacts for those individuals living in disadvantaged communities. Because such neighborhood effects can take time to register, this legacy of the Great Recession may only be gradually revealed over the next decades and generations.
ADDITIONAL RESOURCES


NOTES

1. A slope less than one suggests that the recession is reducing spatial inequality. We don’t represent this possibility in Figure 1.

2. Because PUMAs are based on population size, they do a better job of distinguishing neighborhoods within large cities than within less populated areas.

3. The maps are shaded to indicate decline, no change, moderate increase, and large increase (distinguished by the 75th percentile of each change indicator).

4. Excluding the poorest 5% of PUMAs, the slope for poverty is 1.03, suggesting that the poorest neighborhoods may not have experienced multiplicative effects, but most poor communities became poorer.

5. Regression models predicted changes in poverty, unemployment, and vacancy rates from 2005-07 to 2009-11 from poverty rate, unemployment rate, vacancy rate, percent non-Hispanic black, percent Hispanic, and percent foreign-born in 2005-07.

6. We examine the Primary Metropolitan Statistical Areas surrounding each city. For Chicago, this includes Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry, and Will counties. For Los Angeles, this includes Los Angeles County. For New York, this includes Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland, and Westchester counties.


8. Other research finds that neighborhood economic disadvantage became more concentrated since 2000 at the tract-level (Reardon and Bischoff 2011; Berube, Kneebone, and Nadeau 2011), consistent with our PUMA-level results.

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To further explore the data presented here and to produce customized graphs on recession trends, go to www.recessiontrends.org