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Child Poverty During the Years of the Great Recession: An Analysis of Racial Differences Among Immigrants and US Natives

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Abstract

Although the consequences of the Great Recession are extensively discussed in previous research, three critical issues need to be addressed in order to develop a full portrait of the economic experiences of children during this period. First, given the changing immigrant composition of the US child population, new studies are needed for examining the implications of immigrant status for exposure to child poverty during the recession. Second, it is important to understand how traditional patterns of racial inequality among were transformed during the years of the recession. Finally, it is not clear whether recession-related changes in socioeconomic inequalities continued to have implications for child well-being in the post-recession period. Results from this analysis indicate that the adverse effects of the recession were most intense in states with significant changes in their populations of Black and Latino immigrant children. The results further show that declines in parental work opportunities were more consequential for poverty among Whites and Asians. The analysis also finds differential implications of family contexts for child poverty among Black immigrant and natives during the recession. Finally, the results indicate that increases in racial child poverty disparities during the recession did not disappear in the years following the downturn.

Keywords

Immigration; Poverty; Children; Families; Race

Introduction

Over the past three decades, substantial progress was achieved in our understanding of the demographic consequences of recessions. Much of this progress was associated with an expansion of research examining how recessions affect the components of demographic change (e.g., Aber and Chaudry 2010; Cherlin et al. 2013; Macartney 2013). What we know about the broader consequences of recessions has, however, been constrained by the limited attention to how recessions affect children. Quite recently, the significance of this research

gap was reinforced by the events of the Great Recession. Since then, new questions have emerged concerning how it affected the welfare of children. Among them are questions concerning variations in the vulnerabilities of the children of immigrants and natives during periods of crisis. We know very little, for example, about the processes through which the intersection of race and immigration status contributes in inequalities in the living circumstances of children during recessions. As a result, the empirical basis for developing appropriate interventions for addressing these inequalities remains under-developed.

Three critical concerns need to be addressed in order to develop a complete portrait on the well-being of children during the Great Recession. First, given the changing immigrant composition of the US child population (Hernandez 2004; Hernandez et al. 2007), new studies are needed for examining how the implications of immigrant status during periods of recession. Pre-recession research, for example, shows higher child poverty rates in immigrant than non-immigrant families, especially among Latinos and Black immigrants (Van Hook et al. 2004); thus, it is important to understand how the recession affected these familial differences as well as its impacts on living standards across family contexts. The second question relates to how traditional patterns of racial inequality among were transformed during the years of the recession. While research shows that child poverty increased during the recession (Macartney 2013), little is known concerning whether the mechanisms driving these increases differed across race, or the extent to which these increases were driven by state-level influences. A third concern is associated with whether recession-related changes in socioeconomic inequalities continued to have implications for child well-being in the post-recession period.

The availability of recent data from the American Community Survey (ACS) makes it possible to provide reasonable responses to these concerns. Using these data, we make several contributions to the existing literature. First, we demonstrate the extent to which the economic hardships and racial inequalities observed among children during the Great Recession were driven by variations in the depths of recessions across US states. Second, we identify the major mechanisms through which the economic impacts of recessions were channeled toward children. Specifically, we investigate the role of changes in familial configurations and parental work opportunities as independent influences that adversely affected the welfare of children.

On the whole, we expand research on the negative consequences of recessions among children by focusing on several specific issues. We start by providing insight into the differential effects of recessions across race and among immigrant and non-immigrant children. Next, we identify the major mechanisms driving these effects. Unlike previous studies, we further examine the significance of variations in state-level recessions for poverty among racial minority and non-minority children. Indeed, despite increasing evidence that national-level recessions conceal variations in the depth of recession across US states (Engemann et al. 2011; Shoosmith 2003), these variations have not been incorporated into research examining the implications of recessions for inequalities among children.

Theoretical Perspectives: Recessions, Race, and Inequality

Changes in the welfare of children during recessions can be conceptualized as extensions of larger systematic changes in the outcomes of their parents. While the range of parental characteristics affecting child poverty is extensive, parental work and the disappearance of income are among the most critical (Lichter et al. 2005). Declines in parental work opportunities negatively affect children by reducing the amount of resources available to them (Capps and Fortuny 2006). When these declines are unevenly distributed among parents, they can easily generate subsequent disparities in economic hardship among children. Many of these theoretical pathways are supported by prior empirical research. Indeed, there is a wide range of parental work indicators known to affect poverty disparities among children (Capps and Fortuny 2006).

Immigrant family status creates unique contexts within which the adverse mechanisms of recessions operate. Children in immigrant families are exposed to distinct risk factors that can aggravate the negative effects of economic downturns on their welfare. Low levels of English proficiency and recent immigration status among parents both negatively affect employment outcomes, and thus, the living standards of their children (Shields and Price 2002). Several studies further indicate that immigrant status does not preclude the importance of race as a barrier to socioeconomic attainment (Frank et al. 2010). Among immigrants, race is associated with segmented patterns of assimilation and low levels of socioeconomic attainment among those with racial minority characteristics (Zhou 1997).

Research also generally indicates that economic hardships generated by recessions negatively affect traditional patterns of inequality. In most cases, the hardships are concentrated among economically vulnerable populations (Heathcote, Perri, and Violante 2010; Meyer and Sullivan 2013). Thus, racial and ethnic minorities are often the most negatively affected by these downturns. Recent evidence indicates that the Great Recession resulted in considerable increases in racial income inequality (Kochhar et al. 2011). Compared to Whites, Blacks, and Latinos were also more likely to have had subprime mortgages during the collapse of the housing market that triggered the start of the Great Recession (Darden and Wyly 2010). Race was also a mediator of the labor market consequences of the recession. In other words, race provided a critical pathway through which the negative consequences of the recession were channeled into labor markets. In Michigan, the pre-recession employment disadvantage of Blacks relative to non-Blacks increased by about 10 % points during the Great Recession (Kalousova and Danziger 2013). National-level estimates likewise showed greater increases in unemployment among Blacks and Latinos than among Whites during the recession (Jacobsen and Mather 2011).

Beyond their macrolevel effects on child poverty, recessions also operate through theoretical pathways associated with the dynamics of families. One such pathway is changes in family structure. These changes are generally the product of two factors: delays in the formation of two-parent families and increasing rates of marital dissolution (Gray et al. 2009; Sobotka, Skirbekk, and Philipov 2011). Recessions also contribute to changes in family size. During the Great Recession, for example, inter-generational co-residence increased as more young adults moved in with their parents (Cherlin et al. 2013). Overall, the net economic

consequences for families were severe, leading to increasing conditions of hardship. As income decreased during the recent recession so too did familial access to food and healthcare services (Bruening et al. 2012; Holahan 2011).

Racial differences in family structure can have independent implications for the well-being of children during periods of recession. For example, Blacks and Latinos had a higher prevalence of single-parent families than Whites even before the Great Recession (Eggebeen and Lichter 1991). Consequently, children in Black and Latino families are likely to have had a greater level of exposure to the negative consequences of the recession, compared to children in White families. Racial differences in family size are equally important for understanding how recessions affect the well-being of children. In part, these influences are associated with the differential impact of the recession on family size. During the Great Recession, home foreclosures were higher among Blacks and Latinos than among Whites (Bocian et al. 2010), suggesting that Blacks and Latinos had greater incentives to form merged households with larger family sizes.

Hypotheses

Using insights from our theoretical discussion, we advance previous research by examining the following hypotheses:

Hypothesis 1 Given the disproportional prevalence of unique poverty risk factors among immigrants, across states, recession-related increases in child poverty will be higher in immigrant than in non-immigrant families. Furthermore, we expect the immigrant disadvantage to be concentrated in states with the deepest levels of recession.

Hypothesis 2 Increases in child poverty during the recession will be most intense in states with increasing concentrations of Black and Latino children. Moreover, the disadvantage of Black and Latino children is expected to be concentrated in states that had the most negative economic growth rates (i.e., the deepest levels of recession) during the recession.

Hypothesis 3 The adverse consequences of changes in state-level trends in household configurations for child poverty were most adverse for Blacks and Latinos. Thus, changes factors such as household size and the prevalence of single families are expected to have the most negative implications for child poverty among Blacks and Latinos.

Hypothesis 4 As work opportunities declined, the negative repercussions for child poverty were much lower for White than Blacks and Latinos. Thus, we examine the notion that the consequences of changes in parental work patterns for child poverty were unevenly experienced in White, Black, and Latino families.

Methods

Data and Measures

State-level analyses of socioeconomic trends are a central approach used for examining how recessions affect the outcomes of populations (Chay and Greenstone 2003). In this study, we adopt a similar approach to examine whether there were racially differentiated patterns in the consequences of the recession for children. Thus, we also use estimates of state-specific levels of recession to differentiate between states that experienced various levels of recession during the 2008–2009 period and to investigate whether child poverty trends were conditional on contextual variations in the depth of the recessions. Our state-level recession estimates are taken from annual GDP growth rates provided by the National Bureau of Economic Research (NBER) (BEA 2010). Using these estimates, we define recession states as states that experienced a negative GDP growth rate between 2008 and 2009, the core years of the recession. We further stratify states into quintiles of GDP growth in order to investigate whether child poverty rates increased as the depth of recessions increased.¹

To test our hypotheses, we combined 11 years of data (2000–2011) from the US American Community Survey (ACS) to use in the analysis. These data are available in the Integrated Public Use Microdata Sample database assembled by the Minnesota Population Center (Ruggles et al. 2010). We restricted our analysis to households with children under the age of 18. Immigrant household heads and spouses are identified by their foreign-born status (i.e., whether they were born in a country other than the USA). This information was then used to distinguish between immigrant and non-immigrant households. If household heads or their spouses were immigrants, their households were considered to be immigrant households. Other than immigrant status, the analysis uses a number of indicators that were measured at the household level. These measures include language proficiency (i.e., whether household heads are English proficient), constructed by using US census questions on whether individuals speak English very well or speak only English; average hours worked per week is constructed using household heads' responses to the census question on the usual number hours per week during the past 12 months. Family size is measured as the count of own family members living within the same household. Households with household heads but no spouses of household heads are defined as single-parent households. In addition, we use the US census measures of poverty status to capture whether children were above or below the poverty line. Among immigrants, duration of US residence is estimated using their responses to the question of what year immigrants came to live in the USA. All variables were aggregated to the state level, so that state-year datasets were created for all immigrant and US native households. Our unit of analysis is a state-year and each state-year dataset contains a total of 612 observations. Measures of English proficiency, duration of US residence, household size, and structure (i.e., single-parent household) were log-transformed to account for possible skewness in their distributions across immigration status and race.

¹Analytically, this strategy is similar to those of studies that examine impacts of the recession across quartiles based on changes in real GDP growth rates in all US states (BEA 2010). For each quartile the average change in GDP is as follows: Quartile 1: –0.057; Quartile 2: –0.033; Quartile 3: –0.017; and Quartile 4: 0.017. Examples of states within each quartile include Michigan (Q1), Alabama (Q2), Iowa (Q3), and Texas (Q4).

We also construct separate state-year datasets for the four major race-ethnic groups: White, Non-Black, Asian, and Latinos (i.e., Hispanics).

Analytic Plan

Given the panel structure of our data, the empirical analysis was conducted using state-level fixed-effects models. Standard errors for all models are adjusted to account for serial autocorrelation within states and possible homoscedasticity in the data. Furthermore, robustness tests were conducted for all models using Driscoll–Kraay procedures that correct for the presence of both autocorrelation and homoscedasticity. These tests revealed that the key findings of the study are generally robust to the effects of these influences. Using Eq. 1, the analysis starts by examining the general dynamics of child poverty trends during the years of the recession.

$$Y_{ij} = \alpha + T_{ij}\beta_1 + R_{ij}\beta_2 + X_{ij}\beta_3 + \gamma_i + \varepsilon_{ij} \quad (1)$$

The dependent variable Y_{ij} is the overall child poverty rate of children in state i in year j . Consistent with previous research (e.g., South, Crowder, and Pais 2011), Eq. 1 includes a set of time-trend (i.e., year) dummy variables, T_{ij} , that account for the effects of changes in time trends. Among these, we pay particular attention to estimates for the 2008–2009 period—the peak years of the Great Recession.² Child poverty rates are also dependent on R_{ij} , the percentage of children in each race living in state i in year j ; X_{ij} , a set of familial characteristics, unobserved state-level characteristics that are constant over time, γ_i , and an error term, ε_{ij} .

In the next stage of the analysis, we use race-specific, state-level models to conduct a more definitive analysis of the consequences of the recession.

$$YR_{ij} = \alpha + T_{ij}\beta_1 + F_{ij}\beta_2 + \gamma_i + \varepsilon_{ij} \quad (2)$$

Accordingly, the dependent variable in Eq. 2, YR_{ij} , measures state-specific child poverty trends for each race in state i in year j . T_{ij} remains the same as in Eq. 1, while F_{ij} measures the race-specific familial characteristics of each racial group in each state year. When estimated using data for each race, T_{ij} can be used to assess how race-specific child poverty trends changed during the years of the recession after controlling for other factors.

Results

Descriptive Findings

Child poverty trends for 2000–2011 are presented in Fig. 1. During this period, the children of immigrants had a consistent poverty disadvantage compared to the children of US natives. Since disparities in child poverty increased after 2007 and continued to persist up to

²The Great Recession started in the last quarter of 2007 and ended in mid-2009. However, because it started very late in the 2007 we focus on the years 2008 and 2009 to capture the suggested effects of the recessions. In other words, the negative effects of the recession are assumed to have been more widespread between 2008 and 2009.

2011, we use average poverty rates for the 2008–2011 period to get an initial sense of differences in recession-related increases in child poverty. Between 2008 and 2011, therefore, the absolute increases in child poverty rates among immigrants and US natives were 5 and 3.5 % points, respectively.

Racial disparities were also a persistent feature of poverty trends between 2000 and 2011. Among US natives (Fig. 2), the highest poverty rates were found among children in Black households, who were more than twice as likely to be poor than children in White households, followed by children in Hispanic households. After the onset of the recession in 2007, racial disparities increased and continued to persist even after the end of the recession in 2009. Consistent with our first hypothesis increases in child poverty rates in Black households increased by 9 % points—from 28.6 % to 37.7 %—in absolute terms between 2008 and 2011, while Hispanic rates increased by 6.3 %. In comparison, the corresponding increases in among White (3 %) and Asian (2.5 %) households were more modest.

Racial child poverty disparities among immigrant families were somewhat similar to those in US native families during the observation period (Fig. 3). Accordingly, the most disadvantaged immigrant children were in Black and Hispanic immigrant families. Unlike the disparities found among US native families, however, Hispanics had the highest poverty rates among immigrants. Figure 3 also shows that increases in child poverty after the onset of the recession were greatest among Hispanic households, followed by Blacks, than Whites and Asians. Between 2008 and 2011, for example, child poverty rates among Hispanic immigrants increased by 8 % compared to 7 % among Blacks and 3 % among both Asians and Whites.

Table 1 summarizes the distribution of additional socioeconomic indicators found in immigrant and non-immigrant families. Compared to non-immigrant families, immigrant families had poorly educated parents, larger family sizes, and a lower prevalence of single-parent families. Indicators for both family types, however, varied depending on whether they lived in recession or non-recession states. For instance, regardless of immigration status, families in recession states had lower average parental working hours after 2007 than families in non-recession states.³ During this same period, immigrants and US natives in recession states were more likely to live in single-parent families than their counterparts in non-recession states although these differences were very small. Corresponding indicators for each race/family type (Not shown) further showed that exposure to poverty risk factors such as declining parental working hours and larger family sizes was particularly prevalent among Blacks and Latinos.

Multiple Regression Results

Hypothesis 1—State-level fixed-effects models allow us to conduct a more comprehensive analysis of child poverty trends during the recession and post-recession years. State-level fixed-effects models allow us to conduct a more comprehensive analysis of child poverty trends during the recession and post-recession years. We begin by

³Overall working hours declined by about 3 h among all parents between 2007 and 2011. However, these declines were greater in recession than in non-recession states.

examining the collective experiences of children in immigrants and non-immigrant families. These trends are presented in Table 2. Model 1, in which the dependent variable is the child poverty rate for state i in year j , presents estimates using data for all states. In general, the coefficients are consistent with the patterns shown in the preceding figures. For example, Model 1 indicates that in the core years of the recession, i.e., 2008–2009, child poverty rates were higher among non-immigrants than in the preceding 2-year period and that poverty rates did not decline after the end of the recession. Nevertheless, Table 2 provides additional insight into the influence of variations of state level in recessions on child poverty trends. In Models 2 through 5, we stratify states into quartiles based on changes in their GDP growth rates between 2008 and 2009 (BEA 2010). Accordingly, states in the first quartile experienced the most negative GDP declines, and thus the deepest levels of recession, while the least negative declines occurred among fourth quartile states. Poverty differences associated with these variations are important since they provide insights into disparities in child poverty rates in the states that were hardest hit by the recession relative to the rates in states with higher levels of GDP growth.

Decomposing the analysis in this way reveals other notable findings. Among the most important is the fact that the largest risks of child poverty during the recession and post-recession years were concentrated in states with the deepest levels of recession (Model 2). Furthermore, with the exception of states in the fourth quartile (Model 5), child poverty rates among non-immigrants increased in all state quartiles during the recession years (i.e., 2008–2009).

Similar recession-related poverty trends are found among the children of immigrants. In the bottom panel of Table 2, Model 1 confirms that, on average, levels of child poverty among immigrants increased significantly across states during the years of the recession. Subsequent models show differences in child poverty risks across different recession contexts. Immigrant poverty trends, however, differed from those of non-immigrants in very important ways. For example, overall immigrant child poverty rates shown in Model 1 (bottom panel) increased at a more rapid rate between 2000 and 2011 compared to the corresponding increases found among non-immigrants. Compared to non-immigrants, immigrant child poverty rates only significantly increased in 2008–2009 relative to the preceding period in states that were worst affected by the Great Recession (Model 2, bottom panel).

Hypothesis 2—We begin our regression analysis of racially differentiated patterns of child poverty during the recession (Hypothesis 2) in Table 3. In this case, the regression estimates are used to establish whether the poverty consequences of the recession among US natives were unequally distributed, conditional on trends in the racial concentrations of children across states. Interaction terms in Model 1 indicate that child poverty risks during the core years of the recession (i.e., 2008–2009) were only significant in states with large changes in the percentage of Black children. Child poverty rates also increased with increasing change in the population of Blacks, Latinos, and Whites in the post-recession years (i.e., 2010–2011). T tests examining differences in the coefficients of these racial groups indicated that the between-group differences were not statistically significant at the $p < 0.05$ level. In absolute terms, however, Model 1 indicates that the disadvantage associated

with changes in the size of the populations of Black and Latino children was greater in the post-recession years than during the recession even after controlling for trends in family and parental characteristics.

Poverty disparities by state quartiles are presented in Models 2 through 5 in Table 3. In general, these models confirm that when increases in child poverty occurred across recession contexts, they were more likely to have occurred where Black and Latino children were concentrated. In Model 3 (i.e., second quartile states), interaction terms show a significant post-recession increase in overall child poverty in states that also experienced increases in the percentage of its population of Black children. Moreover, *t* tests examining differences in coefficients indicated that the post-recession poverty increases were higher in states that experienced changes in the percentage of Black children compared to that experienced changes in their percentage of white children ($F = 13.4, p < 0.05$). More extensive racially differentiated patterns are found in states with more moderate levels of recession. For example, in third quartile states (Model 4), the overall child poverty disadvantage during the 2008–2009 period was positively associated with state-level changes in the percentage of Latino and Black children. Similarly, the post-recession increase in overall child poverty was most severe in states with a growing percentage of Black children relative to increases in the percentage of other race children; however, similar poverty increases were associated with changes in the distribution of Latino and White children. Results for fourth quartile states (Model 5) also show, once again, that the overall child poverty disadvantage is mostly concentrated in contexts with growing numbers of Black children. Indeed, *t* tests indicate that the poverty increases observed during the recession were higher in states with a growing percentage of Black children compared with those growing percentages of white children ($F = 5.46, p < 0.05$). Furthermore, overall child poverty trends were adverse in states with large changes in their populations of Latino children in the post-recession years that was unmatched by the corresponding patterns found in areas with positive changes in their populations of Black and White children.

Findings from the analysis of the racially differentiated patterns of immigrants are presented in Table 4 and are used to examine the validity of hypothesis 1 among the children of immigrants. Interaction terms in Model 1, which uses data for all states combined, shows no significant racially different patterns of poverty increases during the recession and post-recession years. Nevertheless, more systematic patterns of racial differences are observed after states are stratified by percentage GDP change. For example, Model 2 indicates that in absolute terms, the post-recession poverty increases were most severe in contexts that experienced increased growth in their populations of Black immigrants. In comparison, the respective associations between child poverty and racial child distributions are relatively smaller among White and Latino immigrants. *T* tests, however, indicated that these poverty increases associated with Black children were not statistically different from those observed in states experiencing increases in the populations of Latino and White children. In second quartile states (Model 3), increases in overall child poverty during the recession years were most adverse in contexts with large changes in their concentration of Black immigrant children. These recession-related increases were statistically higher than those associated with the growth of Latino ($F = 5.56, p < 0.05$) and White children ($F = 9.11, p < 0.05$) living

in second quartile states. In addition, Model 3 indicates that second quartile states with increased growth in their populations of Latino children had greater increases in child poverty during recession and post-recession years, a pattern that is quite distinct from the respective patterns observed among White children of immigrants.

Model 4 shows no racially differentiated pattern among immigrants in third quartile states after other factors are controlled. Nevertheless, in states least affected by the recession (Model 5), overall poverty rates during the recession years were surprisingly low among states with large changes in their concentrations of White and Latino children. Interestingly, even in these circumstances, states with significant changes in their percentages of White children of immigrants appeared to have been the least affected by changes in overall child poverty trends during the years of the recession.

Other findings shown in Tables 3 and 4 are important for understanding differences in the familial determinants of child poverty trends among US natives and immigrants. In the worst affected states, for example, changes in family size resulted in significant increases in child poverty among US natives (Table 3) but not among immigrants (Table 4). Trends in the prevalence of single-parent families were however important determinants of child poverty among both groups in almost all recession contexts. Furthermore, the results indicate that the protective effect of parental education was largely concentrated among the children of US natives and most important among those who lived in states worst affected by the recession (Table 3).

Hypotheses 3 and 4—While the analysis has so far provided some insight into the racial dimensions of child poverty during the recession, a number of outstanding questions still remain unanswered. One of them is the question of whether changes in household and parental-level factors (Hypotheses 3 and 4, respectively) had differential effects on child poverty during the recession years that were conditional on race. Another concern is the question of whether declines in parental work opportunities had racially unequal implications for child poverty during the recession period. Answering these questions requires a more systematic investigation of the determinants of race-specific child poverty trends. Regression models addressing these questions are presented for US natives and immigrants in Tables 5 and 6, respectively. For clarity, these models are estimated using data only for states that experienced recessions between 2008 and 2009.

In Table 5, the analysis begins by confirming that among US natives, child poverty risks during the recession years (i.e., 2008–2009) were very adverse for Blacks (Model 1) and Latinos (Model 4). Interaction terms are then used to estimate the effects of trends in household size and structure on race-specific child poverty trends for each group during the recession (Hypothesis 3). These terms suggest that across race, changes in household size were not a significant predictor of child poverty during 2008–2009. Thus, if Blacks and Latinos were more likely to form large, merged households during the recession, it did not appear to negatively affect the economic welfare of their children. In fact, during the period of the recovery (i.e., 2010 and 2011) trends in household size provided a significant buffering effect on child poverty among native-born Blacks (Model 2) and Latino families (Model 5). What these findings suggest is that Black and Latino native households were

better able to navigate the hardships of the post-recession period by pooling their economic resources. Among US-born Blacks, however, child poverty increases during the recession were also affected by trends in the prevalence of single-parent households (Model 2).

Changes in parental working hours are another explanation for the dramatic increases in poverty found among children during the recession years. However, in contrast to the patterns predicted by hypothesis 4, the effects of these changes were more consequential for US-born Whites than for their Black and Latino counterparts. Differences in these effects among Blacks and Whites are illustrative in this regard. For Whites, the gross risks of child poverty in the years of the recession (Model 7) are reduced by about 92 % after accounting for changes in parental work patterns in Model 9. This suggests that had there been no change in parental work patterns, the risk of poverty among White children during the 2008–2009 recession would have been similar to those they experienced in the 2000–2001 period. Among Blacks, gross child poverty risks during the recession years (Model 1) are reduced by only about 50 % after accounting for parental work patterns (Model 3). This reduction is not as dramatic as that observed among Whites. Thus, the results reinforce the notion that child poverty risks among Blacks during the recession years were less affected by changes in parental work patterns as the corresponding risks observed among Whites.

Race-specific analyses of the determinants of child poverty among immigrants are presented in Table 6. Coefficients showing trends in the gross period poverty rates confirm that among immigrants child poverty risks during the 2008–2009 period were highest in Latino families (Model 4). Yet the results also show a distinctive trend in the child poverty outcomes of Asian immigrants. Unlike children of other races, Asian children experienced a remarkable *decrease* in their poverty outcomes during the years of the recession (Model 10). However, the reasons for this are unclear. When other family-related determinants are examined, the results show that their observed influences are less defined as they were among the children of US natives. In the post-recession years, for example, changes in household size were not associated with child poverty declines in any immigrant group as was observed among native Blacks. Instead, these changes resulted in increases in child poverty rates among Black immigrants. Across immigrant race, changes in the prevalence of single-parent households had no adverse effect on poverty among children during the recession and post-recession years.

Parental work patterns continued to have differential racial implications for child poverty even among immigrants. However, these implications slightly differed from those observed among US natives. For example, accounting for trends in parental work does not change the size of the child poverty risk observed among Asian immigrants during the years of the recession. In short, even if the recession had no effect on the parental work opportunities of Asian immigrant parents, they would still have experienced lower poverty rates in the 2008–2009 period than at any other period since the start of the decade. Among White immigrants, however, gross poverty risks during the recession and post-recession years (Model 7), decreased by more than 50 % after accounting for changes in parental working hours (Model 9). Indeed, these influences are once again stronger among Whites than among Blacks and Latinos in contrast to what is predicted by hypothesis 3. Among Latino immigrants, for example, gross child poverty risks in the recession and post-recession years (Model 4),

remain largely unchanged even accounting for changes in parental work trends (Model 6). Quite possibly, this limited effect of parental work on child poverty among Latino immigrants may be consequences of two factors. The first is the fact that they had the lowest levels of parental work hours among immigrants. The second is that compared to other immigrant groups, Latino immigrants had a unique defined history of rapid poverty increases that predated the start of the recession (Table 6).

Discussion and Conclusions

Recent research on the consequences of recessions provides clear evidence of their unquestionable impacts on the welfare of populations. However, few studies have examined whether the consequences of recessions are unequally distributed among children and identified the mechanisms driving these inequalities. Using the opportunity provided by the Great Recession, this study has expanded existing research by examining how race moderates the negative consequences of recessions on the welfare of children. Our examination of these concerns resulted in several unique contributions to the study of the consequences of the recessions.

Beginning with our first hypothesis, our results confirm the Great Recession had more deleterious impacts on the economic welfare of the children of immigrants than on children in US native families. As such, we demonstrate that among the US child population, the vulnerabilities associated with living in immigrant families were severely exacerbated by the recent economic downturn. At the same time, our results extend research on the immigrant poverty disadvantage by underscoring the fact that their children found it more difficult to recover from the economic consequences of recession compared to children in US-born families. As a result, the children of immigrants faced even more debilitating poverty risks relative to their counterparts in US-born families during the years of the economic recovery.

Consistent with our second hypothesis, we demonstrate that the negative impacts of the recession were more likely to be found in contexts experiencing increases in their populations of Black or Latino children compared with those that experienced changes in their populations of White and Asian child. Nevertheless, as we further suggest, racial differences in these dynamics are much better understood within the context of immigrant and non-immigrant families. On average, Black children in non-immigrant families experienced steeper declines in their economic well-being compared to Black children in immigrant families. Yet for Latinos, the child poverty disadvantage was stronger among those who lived in immigrant than in non-immigrant family contexts (Fig. 3). In many ways, these patterns are in line with the historical legacies of race and immigration status and their effects on the persistent socioeconomic disadvantage among Latinos and Blacks (Hero 2010; Bashir and McDaniel 1997).

Our findings also provide new insights into the mechanisms that explained the disadvantage of Blacks and Latinos during the Great Recession. For example, increases in child poverty during the recession and recovery were more likely to be found in states with large changes in the percentage of their populations of either Black or Latino children. Children in Black and Latino families faced even more important disadvantages when they lived in states

hardest hit by the recession. In these state contexts, however, the racial disadvantages were more pronounced among children in immigrant (Table 4) than non-immigrant families (Table 5).

Our results provide partial support for the hypothesis that changes in familial configurations, defined by structure and size, had more negative impacts on child poverty among Blacks and Latinos (Hypothesis 3). Part of the disadvantage of non-immigrant Blacks, for example, was explained by the adverse effects of the recession on children in single-parent households. Among Black immigrants, changes in household size were also a significant predictor of recession-related increases in children's poverty risks. Compared to children in Black households, however, Whites, Asians, and Latinos did not experience significant negative declines in their economic circumstances as a result of changes in family size.

We fail to confirm the hypothesis that changes in parental work patterns during the recession resulted in more elevated poverty risks among Black and Latino children than among those who were White (Hypothesis 4). Instead, these changes were more important explanations of the child poverty increases found in White and Asian families. Significantly, however, these disparate influences of parental work are somewhat consistent with a larger narrative that emerged from the analysis. While declines in parental work contributed to much of the poverty risks of Whites and Asians in the 2008–2009 period, among Blacks the major influences of these risks were more diverse. For children in Black households, our results suggest that these risks were consequences of the combination of declines in parental work patterns and the structural disadvantage associated with changes in familial configurations. Among Latino immigrant children, the limited influence of parental work trends was also informative. Accounting for these trends made no difference in explaining their children's poverty risks (Table 6), while at least in states hardest hit by the recession, their disadvantage persisted even after trends in parental English proficiency is controlled (Table 4).

In general, these findings should be understood in light of a number of limitations in found in analysis. The analysis assumes that poverty rates among White children, for example, do not covary with changes in racial and ethnic composition. Furthermore, as with all analyses conducted at higher levels of aggregation (e.g., states), the analysis discounts important variations that may have occurred in smaller units of analysis (e.g., within neighborhoods and households). Despite these limitations, however, our analysis highlights the need for careful consideration of racial patterns and state-specific variations in research on the consequences of economic downturns. Furthermore, it suggests that the study of the broader consequences of recessions is also likely to be enhanced by the examination of whether the changes they generate extend into periods of recovery. Our results further raise important questions about whether the increased inequalities observed among children during recessions have longer-term impacts on their development throughout the life course. As scholars indicate, conditions experienced early in life can have long-term impacts on health and socioeconomic indicators later in adulthood (Elo and Preston 1992; Hayward and Gorman 2004). What this means for the future of children who lived through the recession is an important question and one that must be addressed in future studies.

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Fig. 1.
Child poverty trends in US households with children

Fig. 2.
Racial child poverty trends in US native households

Fig. 3.
Racial child poverty trends in US immigrant households with children

Table 1

Mean indicators for immigrants and US natives in recession and non-recession states

	Immigrants			US natives		
	All years		2008–2011	All years		2008–2011
	All states	Recession states	Non-recession states	All states	Recession states	Non-recession states
State poverty rate	0.160 [*]	0.186 [*]	0.175	0.143	0.159	0.174
Household heads						
Has post-secondary schooling	0.671 [*]	0.664 [*]	0.703 [*]	0.756	0.789	0.754
Speaks English well	0.680 [*]	0.660 [*]	0.723 [*]	0.993	0.994	0.986
Average hours worked	37.56 [*]	36.150	37.020	37.502	36.203	36.984
Family size	4.231 [*]	4.269 [*]	4.243 [*]	3.907	3.921	3.988
Single-parent	0.096 [*]	0.105 [*]	0.097 [*]	0.169	0.176	0.181

Data source: American Community Survey 2000–2011^{*} Significantly different from US natives at the $p < 0.05$ level

Metric coefficients showing child poverty trends by family immigration status and quintile of state economic growth during the years of the recession

Table 2

	All States Model 1	Q1 States Model 2	Q2 States Model 3	Q3 States Model 4	Q4 States Model 5
<i>Children of US natives</i>					
Period trend					
2000–2001 (Ref.)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
2002–2003	0.004*	0.008**	0.002	0.004	0.001
2004–2005	0.011**	0.017**	0.008*	0.012*	0.006
2006–2007	0.010**	0.019**	0.007*	0.008	0.004
2008–2009	0.016**	0.030**	0.015**	0.012*	0.005
2010–2011	0.043**	0.067**	0.040**	0.035**	0.028**
Constant	0.110**	0.111**	0.096**	0.102**	0.130**
<i>Children of immigrants</i>					
Period trend					
2000–2001 (Ref.)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
2002–2003	0.009	0.014	0.005	−0.010	0.029
2004–2005	0.019**	0.022*	0.014	0.001	0.042**
2006–2007	0.019**	0.029**	0.009	0.007	0.033*
2008–2009	0.025**	0.049**	0.014	0.011	0.026*
2010–2011	0.063**	0.095**	0.049**	0.041*	0.069*
Constant	0.118**	0.109**	0.124**	0.138**	0.102

Quintiles 1 through 4 are constructed using estimates of state-level economic growth during the recession between 2008 and 2009

Data source: American Community Survey 2000–2011

* $p < 0.05$;

** $p < 0.01$;

*** $p < 0.001$

Metric coefficients showing predictors of child poverty trends in US-born households by state quartile of GDP change during the Great Recession

Table 3

	All States Model 1	Q1 States Model 2	Q2 States Model 3	Q3 States Model 4	Q4 States Model 5
Period trend					
2000–2001 (Ref.)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
2002–2003	0.007**	0.012**	0.006	0.005	0.004
2004–2005	0.013**	0.023**	0.014*	0.014**	0.004
2006–2007	0.010**	0.023**	0.013*	0.011	–0.003
2008–2009	–0.003	–0.055	0.006	–0.080**	–0.028*
2010–2011	0.005	0.294*	0.033	–0.072*	–0.019
Child racial distribution					
Percent Black	–0.027	–0.031	0.249	–0.480**	–0.147
Percent Latino	–0.123	–0.129	–0.140	–0.186	–0.384**
Percent White	–0.091	0.070	0.131	–0.315**	–0.154*
Percent other (Ref)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Child race × period interactions					
Percent Black × 2008–2009	0.039*	0.090	0.017	0.107**	0.057*
Percent Latino × 2008–2009	–0.004	0.139	0.114	0.143*	0.018
Percent White × 2008–2009	0.021	0.102	0.015	0.102**	0.028**
Percent Black × 2010–2011	0.056*	–0.212	0.083**	0.159**	0.031*
Percent Latino × 2010–2011	0.065*	–0.377	–0.020	0.107	0.086**
Percent White × 2010–2011	0.032*	–0.253	0.009	0.113**	0.036*
Household characteristics					
Household size (log)	0.228**	0.524*	0.262*	0.172	0.205
Percent single-parent (log)	0.096**	0.160**	0.054*	0.073*	0.085*
Percent college educated head	–0.200	–0.370**	–0.109	–0.224**	–0.127
Constant	0.857	–0.234	–0.233	0.383	0.831
No. of observations	612	156	156	156	144

	All States Model 1	Q1 States Model 2	Q2 States Model 3	Q3 States Model 4	Q4 States Model 5
No. of states	51	13	13	13	12

Data source: American Community Survey 2000–2011

* $p < 0.05$;
** $p < 0.01$;
*** $p < 0.001$

Metric coefficients showing predictors of child poverty trends in immigrant households by state quartile of GDP change during the Great Recession

Table 4

	All States Model 1	Q1 States Model 2	Q2 States Model 3	Q3 States Model 4	Q4 States Model 5
Period trend					
2000–2001 (Ref.)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
2002–2003	–0.005	–0.003	–0.004	–0.016	0.013
2004–2005	–0.001	–0.005	–0.001	–0.007	0.018
2006–2007	–0.006	–0.012	–0.012	–0.001	0.016
2008–2009	0.011	–0.101	–0.030	0.120	0.096*
2010–2011	0.036	–0.137	0.003	0.181	0.073
Child racial distribution					
Percent Black	–0.032	–0.347	–0.294	0.300	0.101
Percent Hispanic	–0.019	–0.111	–0.131	0.195	–0.088
Percent White	–0.009*	–0.157	–0.186	0.144	–0.155*
Percent other (Ref)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Generational status					
Second-generation children	–0.062	0.157	0.208	–0.263**	–0.134*
Chile race × period interactions					
Black × 2008–2009	0.026	0.207	0.180*	–0.306	–0.084
Hispanic × 2008–2009	–0.009	0.132	0.050*	–0.141	–0.105*
White × 2008–2009	–0.024	0.162	–0.013	–0.131	–0.155*
Black × 2010–2011	–0.012	0.332*	0.169	–0.306	–0.169*
Hispanic × 2010–2011	0.028	0.229*	0.076**	–0.128	–0.023
White × 2010–2011	–0.029	0.279*	–0.041	–0.238	–0.032
Household characteristics					
Household size (log)	–0.103	–0.013	0.099	–0.217	–0.158
Percent single-parent (log)	0.012**	0.013	0.008	0.008	0.009
Percent college educated head	–0.074	–0.121	–0.091	–0.082	–0.106
Average duration of residence (log)	–0.045*	–0.088	–0.059	–0.041	–0.033

	All States Model 1	Q1 States Model 2	Q2 States Model 3	Q3 States Model 4	Q4 States Model 5
Household heads English proficient	−0.196	−0.111	−0.095	−0.095	−0.170 *
Constant	0.605 ***	0.354	0.156	0.707	0.744 *
No. of observations	612	156	156	156	144
No. of states	51	13	13	13	12

Data source: American Community Survey 2000–2011

* $p < 0.05$;
** $p < 0.01$;
*** $p < 0.001$

Table 5

Metric coefficients showing predictors of race-specific child poverty trends in US-born households in all recession states

	Blacks			Latinos			Whites			Asians		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Period trend												
2000–2001 (Ref.)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.00)	(0.000)	(0.000)	(0.000)	(0.000)	(0.00.)
2002–2003	0.013	0.015	–0.002	0.014	0.009	0.100	0.003	0.005**	–0.004*	0.035	0.020	0.021
2004–2005	0.048*	0.049**	0.024*	0.042**	0.041**	0.034*	0.009**	0.011**	0.002	0.026	0.017	0.018
2006–2007	0.031*	0.038**	0.006	0.030	0.030*	0.022	0.007**	0.009**	0.001	0.017	0.009	0.008
2008–2009	0.053**	0.278	0.024	0.037**	0.108	0.028*	0.013**	0.037	0.001	0.027	0.310	0.009
2010–2011	0.096**	1.12**	0.036*	0.080**	0.422	0.053**	0.034**	–0.004	0.012**	0.041	0.184	0.018
Household characteristics												
Household size (log)		0.092			0.161			0.443**			0.073	
Percent single-parent (log)		–0.098**			0.036			0.063			–0.021	
Percent college educated heads		–0.184			–0.236***			–0.184**			–0.150**	
Household size × 2008–2009		0.114			–0.050			–0.014			–0.222	
Household size × 2010–2011		–0.798**			–0.36			0.069			–0.087	
Single-parent (log) × 2008–2009		0.072*			0.004			0.001			–0.002	
Single-parent (log) × 2010–2011		–0.006			–0.115**			0.027**			0.040	
Average hours worked per week			–0.012**			–0.009**			–0.007**			–0.006**
Constant	0.246**	0.064**	–1.26**	0.184**	0.067	0.507**	0.077**	–0.318**	0.376**	0.082**	0.056	0.463**
No. of observations	511	511	511	516	516	516	516	516	516	467	467	467
No. of states	43	43	43	43	43	43	43	43	43	43	43	43

Data source: American Community Survey 2000–2011

* $p < 0.05$;** $p < 0.01$;*** $p < 0.001$

Table 6

Metric coefficients showing predictors of race-specific child poverty trends in immigrant households in all recession states

	Blacks			Latinos			Whites			Asians		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Period trend												
2000–2001 (Ref.)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
2002–2003	–0.021	–0.019	–0.035	0.034*	0.028*	0.030*	0.001	0.003	–0.003	–0.011	–0.016	–0.011
2004–2005	0.047	0.038	0.019	0.045**	0.036**	0.042**	0.005	0.007	0.000	–0.016	–0.024	–0.016
2006–2007	0.022	0.007	0.007	0.047**	0.039**	0.045**	0.002	0.006	–0.001	–0.018	–0.024	–0.017
2008–2009	0.030	0.143	0.012	0.058**	0.299	0.052**	0.006	–0.146	–0.002	–0.028*	–0.133	–0.028**
2010–2011	0.063*	–0.614*	0.027	0.103**	0.267	0.093**	0.022**	0.057	0.010	0.006	–0.025	0.003
Percent second generation		0.281			–0.047			–0.087			0.073	
Household characteristics												
Household size (log)		–0.155			–0.122			0.100			–0.031	
Single-parent households		–0.015			–0.028			0.002			–0.006	
College educated H heads		–0.215			–0.024			–0.010			0.023	
Household size × 2008–2009		–0.070			–0.198			0.140			0.039	
Household size × 2010–2011		0.462*			–0.143			–0.028			0.028	
Single-parent households × 2008–2009		0.013			–0.022			0.012			–0.017	
Single-parent household × 2010–2011		–0.001			–0.025			–0.001			0.006	
Hours worked per week			–0.008**			–0.002			–0.004**			–0.002*
Household heads English proficient		–0.215*			–0.108			–0.109			–0.158**	
Average duration of residence (log)		0.052*			0.034			0.014			0.023	
Constant	0.159**	0.698**	0.467**	0.191**	0.384**	0.273**	0.061**	0.069	0.226**	0.113	0.096	0.193**
No. of observations	490	490	490	510	510	510	516	516	516	516	516	516
No. of states	43	43	43	43	43	43	43	43	43	43	43	43

Data source: American Community Survey 2000–2011

*
 $p < 0.05$;**
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