The Financial Vulnerability of Minority Homeowners:

Evidence from the Recent Financial Crisis*

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Summary

Homeownership has long been viewed as an important avenue for wealth accumulation, and minorities historically have lower rates of housing ownership than whites. Liquidity constraints and wealth disparities are thought to create substantial barriers to minority homeownership and thus contribute to the substantial racial differences in homeownership. In part to deal with this issue, public policy has tried to encourage homeownership. President George W. Bush famously said in a 2004 speech that "*We're creating... an ownership society in this country, where more Americans than ever will be able to open up their door where they live and say, welcome to my house, welcome to my piece of property*".

However, homeownership per se may not lead to increases in wellbeing, as wealth and liquidity gaps may leave minority households more vulnerable to negative economic shocks. Further, the potential increase vulnerability of minority homeowners may contribute substantially to perpetuating the wealth gap through lower credit scores, increased cost of borrowing, and restricted opportunities in labor and housing markets. While researchers have documented the greater exposure of minority households to income and health shocks, much less is known about the differential impact of such shocks, especially in housing markets. The pattern of mortgage delinquencies and foreclosures suggest that the last recession had a large differential impact in housing outcomes by race. By 2007 blacks already had a 3% rate of severe mortgage delinquency, while whites still had less than a 1% rate, and by 2009 more than 1 in 10

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black and Hispanic families had a severely delinquent mortgage, while that number was less than 1 in 25 for white families.

The main goal of this paper is to examine the consequences of a major negative event – the recent housing market collapse and recession that ensued – on housing outcomes for a large sample of black, white, Asian, and Hispanic homeowners. More specifically, we ask whether the greater impact of the housing market collapse on black and Hispanic homeowners is driven primarily by *racial differences in exposure to the negative shocks*, due perhaps to the fact that black and Hispanic households were more likely to participate in the subprime mortgage market, to lose jobs in the recession or to own homes in cities and neighborhoods that experiences larger losses in value or, as motivated above, *racial differences in the vulnerability to large negative events*, perhaps because black and Hispanic homeowners have fewer personal and family assets on which to draw in such circumstances.

Some empirical challenges arise in the estimation of differential vulnerability by race. First, there is a lack of micro data that allows researchers to observe home purchases and mortgage decisions by race, and that also tracks loan performance over time for a representative sample of homeowners. Second, minorities and non-minorities may face different credit constraints, so it is important to control for individual credit scores, information that is not available in public data sets but that is heavily used by lenders when providing credit to customers. Third, loan terms may vary by race, i.e., minorities potentially face higher interest payments that could directly explain worse loan performance. Finally, it is difficult to find settings with broad based negative economic shocks that allow researchers to disentangle the differential vulnerability by race.

We overcome those issues by first assembling a unique data set that links a representative sample of Home Mortgage Disclosure Act (HMDA) data on home purchase and refinance mortgages originated between May and August in the years between 2004 and 2008, to public records data on housing transactions and liens for approximately 270,000 homeowners in seven distinct metropolitan housing markets: Chicago IL CMSA, Cleveland OH MSA, Denver CO MSA, Los-Angeles CA CMSA, Miami-Palm Beach Corridor, San Francisco CA CMSA, and Washington DC-Baltimore MD suburban Corridor. We then provided this rich sample to a major credit reporting agency, Experian™ Information Solutions, Inc. The credit rating agency used the name and address to match borrowers to archival credit reporting data from March 31 in the year preceding the mortgage origination and from March 31 for every subsequent year through 2009. This matched mortgage-home-credit data provides detailed information on the financial circumstances of each homeowner at the time of mortgage origination, the terms of the mortgage including whether it was a rate spread or high cost loan as defined in HMDA, and also tracks the borrowers' mortgage payment history over the subsequent years.

Our empirical results show that black and Hispanic households are more likely to become delinquent and default on their mortgages even after controlling for detailed attributes of the borrowers and loans, such as credit scores and loan to value ratios. For home purchase mortgage holders where differences are the largest, differences range between 2 and 4 percentage points for blacks and Hispanics on foreclosures and mortgage delinquencies. Racial and Ethnic differences in loan performance are starker in 2008 and 2009, at the height of the housing/financial crises. The differences in credit market outcomes are relatively small prior to 2007 regardless of the origination year, but these differences grew rapidly for all origination years in our sample as housing and financial markets declined.

One potential explanation for the higher delinquency and foreclosure rates is that minorities were concentrated in the subprime sector of the market being charged higher interest rates and potentially facing more onerous loan terms than white borrowers with equivalent credit history and circumstances. Black and Hispanic households are indeed much more likely to receive rate spread or high cost loans, i.e. loans where the Annual Precentage Rate (APR) exceeds the yield on treasury bonds by three percentage points. Interestingly, though, the inclusion of the rate spread variable has at most moderate impact on the estimated racial differences in future credit market outcomes (declines range between 2 and 18 percent averaging a 9 percent decline). Moreover, racial differences in delinquency and default are relatively unaffected by the inclusion of lender fixed effects, which explain a substantial fraction of the racial differences in the incidence of rate spread loans (declines between 57 and 77 percent).

A fundamental and obvious next question is whether the greater impact of the housing market collapse on black and Hispanic homeowners is driven primarily by racial and ethnic differences in exposure to the negative shock, or, as motivated above, driven primarily by racial and ethnic differences in the vulnerability to large negative events. To capture shocks associated with both the labor and housing market, we include a series of controls that measure variation in the severity of the crisis: (i) tract and county by year fixed effects, (ii) individual indicators of a household's equity position in each year, (iii) the interaction of equity position and county by year unemployment rates, and (iv) race-specific measures of unemployment rates by county and year. The inclusion of race specific employment controls leads to an appreciable reduction in the estimated black-white differences in delinquencies and foreclosures, but substantial racial differences continue to exist in the home purchase market. These controls have little impact on estimated differences for Hispanics. Thus, there exists a large potential explanatory role for the greater vulnerability of minority households to negative shocks.

This interpretation is validated by additional analyses where we interact our race and ethnicity indicators with individual measures of creditworthiness or with the date of the home purchase. We find that racial and ethnic differences in mortgage delinquency and foreclosure persist across a broad spectrum of homebuyers even those having relatively strong credit scores and who obtained lower cost loans. Further, we find that most of the racial and ethnic differences in both home purchase and refinance loans arise for borrowers who purchased their homes relatively recently and a substantial portion of these differences persist even after controlling for the equity position of the household. Our analysis calls into question the idea that encouraging homeownership provides an obvious mechanism for reducing racial disparities in wealth. To the extent that increases in homeownership are driven by the entry of especially vulnerable households to the owner-occupied market, such a push may backfire, leaving these vulnerable households in a very difficult financial situation following any large negative shock in the market.