A LOOK BEHIND THE NUMBERS

An Uneven Recovery: Home Lending in the Fourth District by Race and Income

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Nearly 10 years into the economic recovery, home mortgage lending in the Fourth Federal Reserve District (Ohio, western Pennsylvania, eastern Kentucky, and the northern panhandle of West Virginia) still remains affected by the Great Recession. In this brief, we highlight key findings from the seven county-specific home lending reports we published in the *A Look Behind the Numbers* series. Specifically, we document the differences across the seven counties, focusing on the recovery in low- and moderate-income (LMI)[1] neighborhoods and among white borrowers and black borrowers.

Summarizing home lending conditions across the seven counties—Allegheny, Pennsylvania (Pittsburgh); Cuyahoga, Ohio (Cleveland); Fayette, Kentucky (Lexington); Franklin, Ohio (Columbus); Hamilton, Ohio (Cincinnati); Lucas, Ohio (Toledo); and Montgomery, Ohio (Dayton)—two main findings emerge from our analysis:

- Application rates in the seven counties' LMI neighborhoods decreased sharply as the Great Recession took hold and remain well below the prerecession rates, yet the rate of loans moving from application to origination in LMI neighborhoods has broadly increased since the recession and now exceed prerecession rates.

- In every county examined, black borrowers experienced larger declines in home purchase rates than white borrowers did from 2005 to 2010. Although home purchase rates increased from 2010 to 2016 for both races, the gains were lower among black borrowers when compared to their white counterparts. This race disparity persists regardless of borrower income.

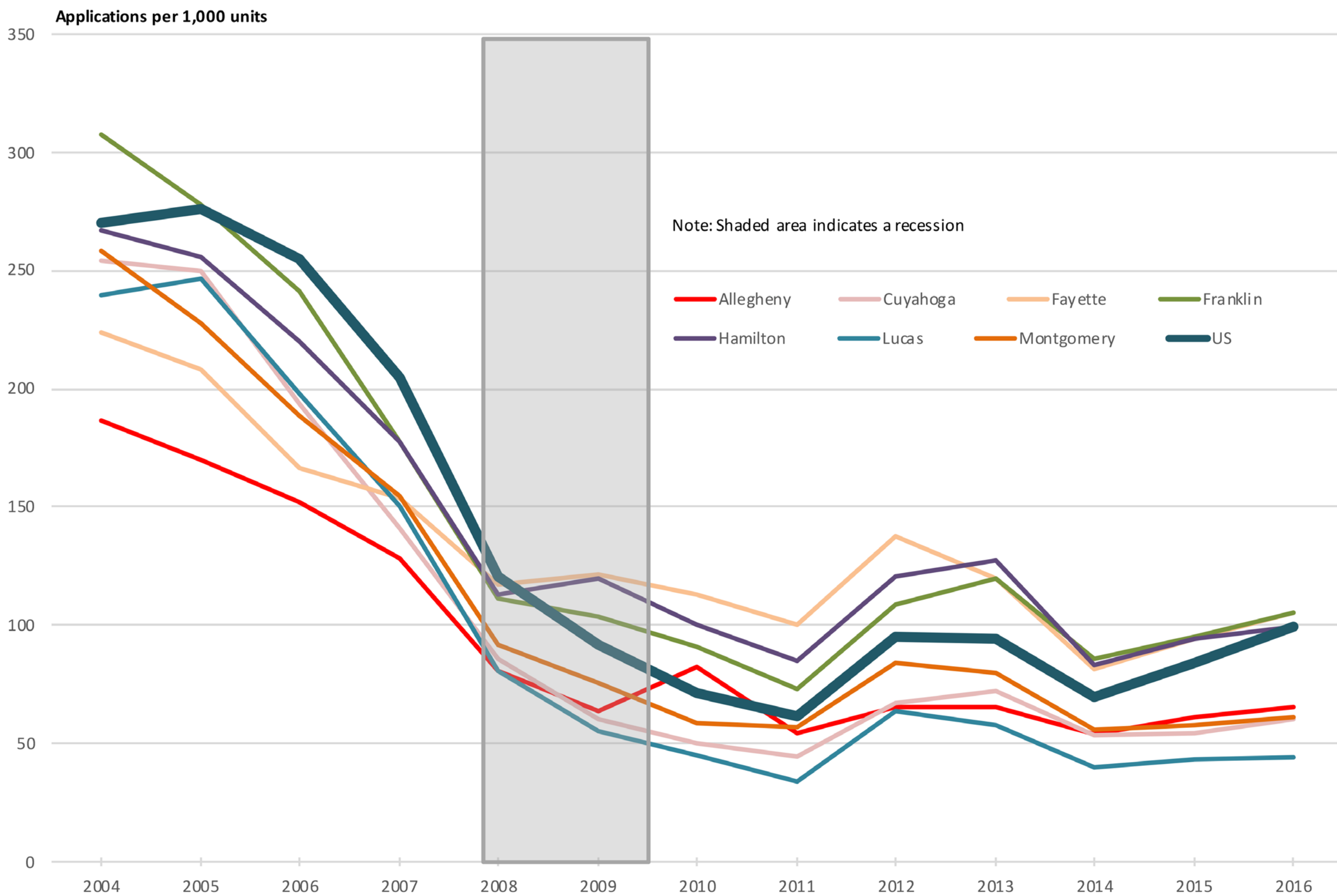
It is important to note the data used in these analyses do not include all of the factors lenders use to determine the credit-worthiness of the borrower.[2] Also, each household must evaluate whether it is better off renting or buying. It is our intent to highlight mortgage patterns in the District's major counties so that policymakers and regulators are aware of home lending disparities and may use the data when examining the effects of the Great Recession.

DEPRESSED APPLICATION RATES

Home mortgage application rates in the nation's LMI neighborhoods declined sharply prior to the Great Recession (*Figure 1*). During the recession, mortgage application rates in Fourth District counties closely followed the national trend.

Of the counties we examined, Fayette and Hamilton Counties fared the best during the recession, often outperforming the national average. By contrast, in Lucas County's LMI neighborhoods, the application rate fell by more than 80 percent from 2004 to 2010, the year after the recession ended. Application rates have improved from 2014 through 2016 across the Fourth District's LMI neighborhoods, but no county has returned to its prerecession levels. More recently, county performance has diverged; Fayette and Hamilton Counties follow the national uptick, while Lucas, Montgomery, and Allegheny Counties remain at relatively low application rates. Although the causes of this sustained depression in application rates are unknown, what is clear is that households' desire to apply for home loans in LMI neighborhoods in the Fourth District and across the country remains well below prerecession levels.

Figure 1. Applications in LMI Neighborhoods per 1,000 Owner-Occupied Units



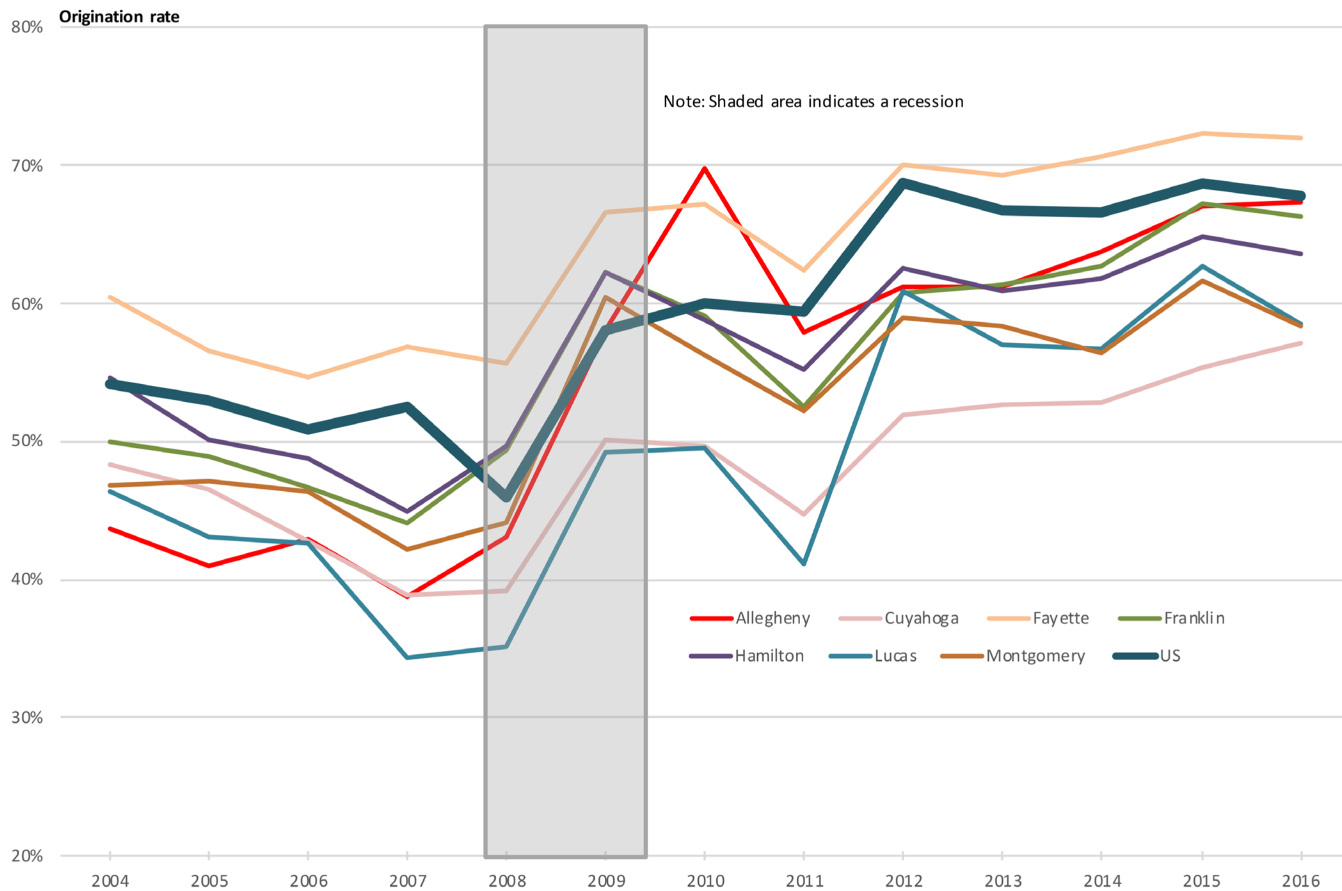
Sources: Home Mortgage Disclosure Act (HMDA) data and US Census Bureau; purchase originations for first-lien, owner-occupied, 1- to 4-family units.
Prepared by the Community Development Department at the Federal Reserve Bank of Cleveland.

RISING ORIGINATION RATES

Home loan origination rates—defined as the percent of home loan applications that are approved by the lender and accepted by the borrower—have steadily increased in most of the the Fourth District's LMI neighborhoods since 2010, the year after the Great Recession ended (*Figure 2*).

In the three years preceding the Great Recession, origination rates in LMI neighborhoods declined across most counties before increasing throughout the recession. With the exception of rates in 2011, origination rates steadily rose from 2008 through 2016 and exceeded prerecession levels in most of the counties we examined. Importantly, since the recession ended, the origination rates in all Ohio counties remained below the nation's rate through 2016. For all counties, the jumps in origination rates in 2009 and 2010 were driven largely by refinance activity because of the low interest rates. The increase in origination rates is likely attributable to better credit profiles among those borrowers applying for loans in LMI neighborhoods.

Figure 2. Origination Rates in LMI Neighborhoods



Sources: Home Mortgage Disclosure Act (HMDA) data and US Census Bureau; purchase originations for first-lien, owner-occupied, 1- to 4-family units.
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THE RACE GAP IN HOME LENDING

The disparity in lending between white borrowers and black borrowers is evident in each county and year we examined. To better examine that disparity, we looked at home purchase loan rates; home purchase loan rates take into consideration the number of loans granted to each race and income group compared to total number of households in each race and income group.

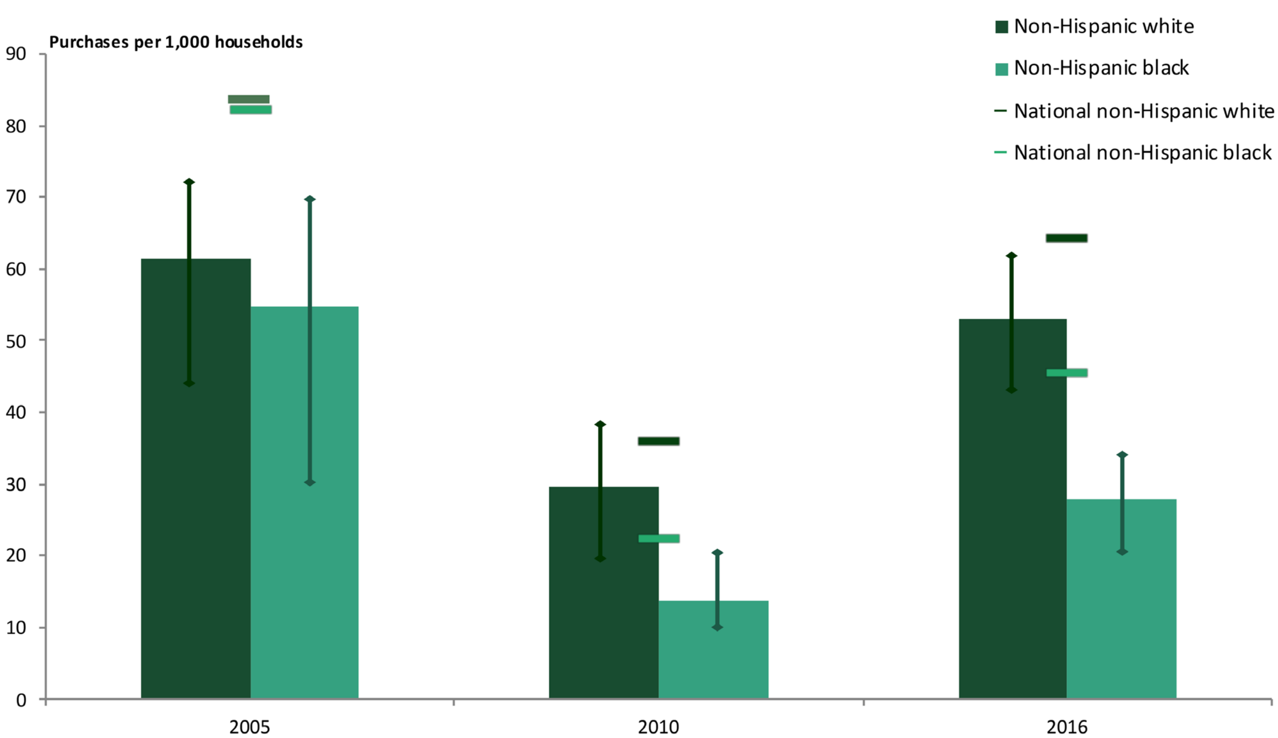
Examining the differences between black non-LMI borrowers and white non-LMI borrowers, we find the home purchase loan rates for black non-LMI borrowers are consistently lower than the rates for white non-LMI borrowers (*Figure 3*). The bars in Figure 3 represent the average home purchase rate for the seven counties. The points at the ends of the vertical lines within each bar represent the county with the highest home purchase rate and the county with the lowest home purchase rate.

As illustrated by the bars in Figure 3, the difference in the home purchase rate between the black non-LMI borrowers and white non-LMI borrowers doubled between 2005 and 2010 and doubled again between 2010 and 2016. The home purchase rate for white non-LMI borrowers in 2016 nearly rebounded to the 2005 prerecession rate. The rate for black non-LMI borrowers in 2016, however, is still half of the 2005 rate. Nationally, the home purchase rate in 2005 was well above the seven counties' rate for non-LMI borrowers. In 2010, the national rate edged closer to that of the seven counties before it diverged again in 2016.

Looking at just black non-LMI borrowers, we find a larger difference in home purchase rates across the seven counties in 2005, but the difference across the counties shrinks in both 2010 and 2016. Prior to the Great Recession (2005), purchase rates by black non-LMI borrowers were highest in Fayette County and lowest in Allegheny County. The difference across the counties was much smaller in 2016 (as illustrated by the shorter vertical line), but Fayette County still had the highest purchase rate and Cuyahoga County had the lowest rate.

We find a similar pattern when looking at white non-LMI borrowers. The difference across counties was larger in 2005 than in the 2010 and 2016. Fayette County had the highest rate of home purchases per 1,000 white non-LMI borrowers in all three years examined, while Lucas County had the lowest rate in all three years.

Figure 3. Non-LMI Home Purchase Loans by Race and Income of Borrowers per 1,000 Households across Seven Counties



Sources: Home Mortgage Disclosure Act (HMDA) data and US Census Bureau; purchase originations for first-lien, owner-occupied, 1- to 4-family units.
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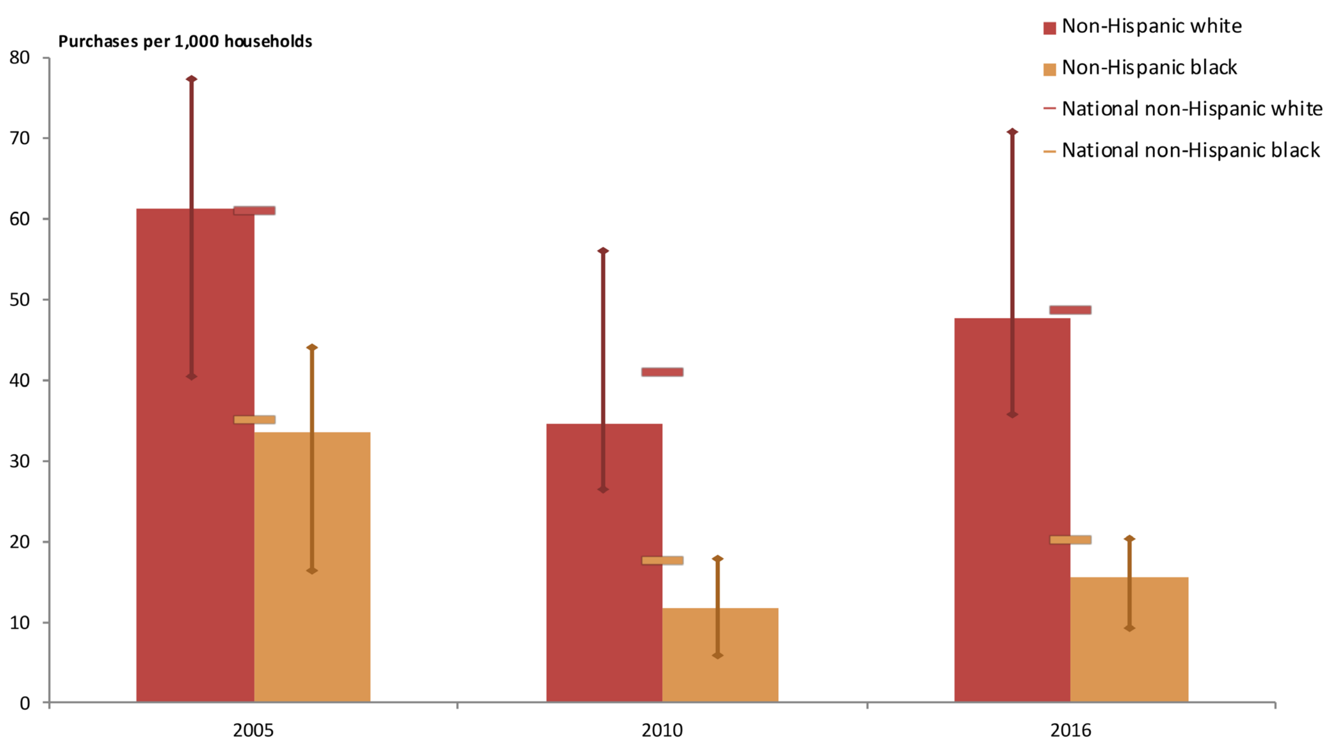
LMI borrowers experienced trends similar to their non-LMI counterparts. We find that home purchase rates for black LMI borrowers are consistently lower than the rates for white LMI borrowers (*Figure 4*). The bars in Figure 4 represent the average home purchase rates for LMI borrowers across the seven counties. The points at the ends of the vertical lines within each bar represent the county with the highest home purchase rate and the county with the lowest home purchase rate.

Although the home purchase rates decreased for both races, the home purchase rate for black LMI borrowers fell by 65 percent from 2005 to 2010, while the home purchase rate for white LMI borrowers fell by 44 percent. Both races experienced increases in home purchase rates from 2010 to 2016, but the gains were greater for white LMI borrowers (38 percent) than they were for black LMI borrowers (33 percent). When compared to the nation, we find at least one county among the seven examined equaled or exceeded the nation's home purchase rate in each year and for both races.

Examining the differences across the seven counties (illustrated by the vertical lines within the bars), we find that the gap between the county with highest home purchase rate and the county with lowest home purchase rate for black LMI borrowers shrank from 2005 to 2010 but stayed the same from 2010 to 2016. The home purchase rate for black LMI borrowers was highest in Franklin County in all three years examined. In 2005, Allegheny County's black LMI borrowers had the lowest home purchase rate when compared to the other six counties examined. Lucas County's black LMI borrowers experienced the lowest home purchase rate in both 2010 and 2016.

Looking at home purchase rates for white LMI borrowers across the seven counties, we find the difference in the rates across the counties decreased from 2005 to 2010 but increased from 2010 to 2016. Fayette County white LMI borrowers had the highest home purchase rate in each year examined. In 2005, white LMI borrowers in Allegheny County experienced the lowest home purchase rate. In both 2010 and 2016, Lucas County's white LMI borrowers experienced the lowest home purchase rate.

Figure 4. LMI Home Purchase Loans by Race and Income of Borrowers per 1,000 Households across Seven Counties



Sources: Home Mortgage Disclosure Act (HMDA) data and US Census Bureau; purchase originations for first-lien, owner-occupied, 1- to 4-family units.
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SUMMARY OF ANALYSIS

Home lending in the Fourth Federal Reserve District's major counties was strongly impacted by the Great Recession. Both application rates and origination rates plummeted across LMI neighborhood income groups as we entered the Great Recession. Origination rates in LMI neighborhoods have steadily improved and are now above prerecession levels for all seven counties examined. Yet, application rates still remain well below the years leading up and into the Great Recession. Both black borrowers and white borrowers experienced declines in home purchase loan rates from 2005 to 2010 before increasing from 2010 to 2016. However, for black borrowers (both LMI and non-LMI) the declines in home purchase rates were larger and the recovery was weaker than for their white counterparts.

DATA DETAILS

In this report, we examine home lending activity in the largest counties of the Fourth Federal Reserve District using Home Mortgage Disclosure Act (HMDA) data. Enacted in 1975, the HMDA requires most mortgage lending institutions to report annually on their home mortgage lending activity specific data that can be useful in identifying whether the institutions are meeting the housing finance needs of the communities in which they operate. Lenders are required by law to provide information on the disposition of applications, including loan purpose and type, applicant income and race, and the geographic location of applications and originations. This rich dataset of application and loan-level data, which is distributed by the Federal Financial Institutions Examination Council (FFIEC), allows us to track application and origination trends across time and by neighborhood groups, borrower income groups, and race.

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[1] Low income: Median family income for the census tract (or borrower income) is less than 50 percent of the MSA's median family income. Moderate income: Median family income for the census tract (or borrower income) is greater than or equal to 50 percent but less than 80 percent of the MSA's median family income.

[2] Researchers at the Federal Reserve Board of Governors found that the declines in home purchase lending since 2006 are mainly due to less lending to lower-credit score borrowers, regardless of race, see *FEDS Notes* article at tinyurl.com/ya8a69fl.