Mortgage Lending by Applicant and Neighborhood Income

Third Federal Reserve District, 2004-2012

Federal Reserve Bank
of Philadelphia

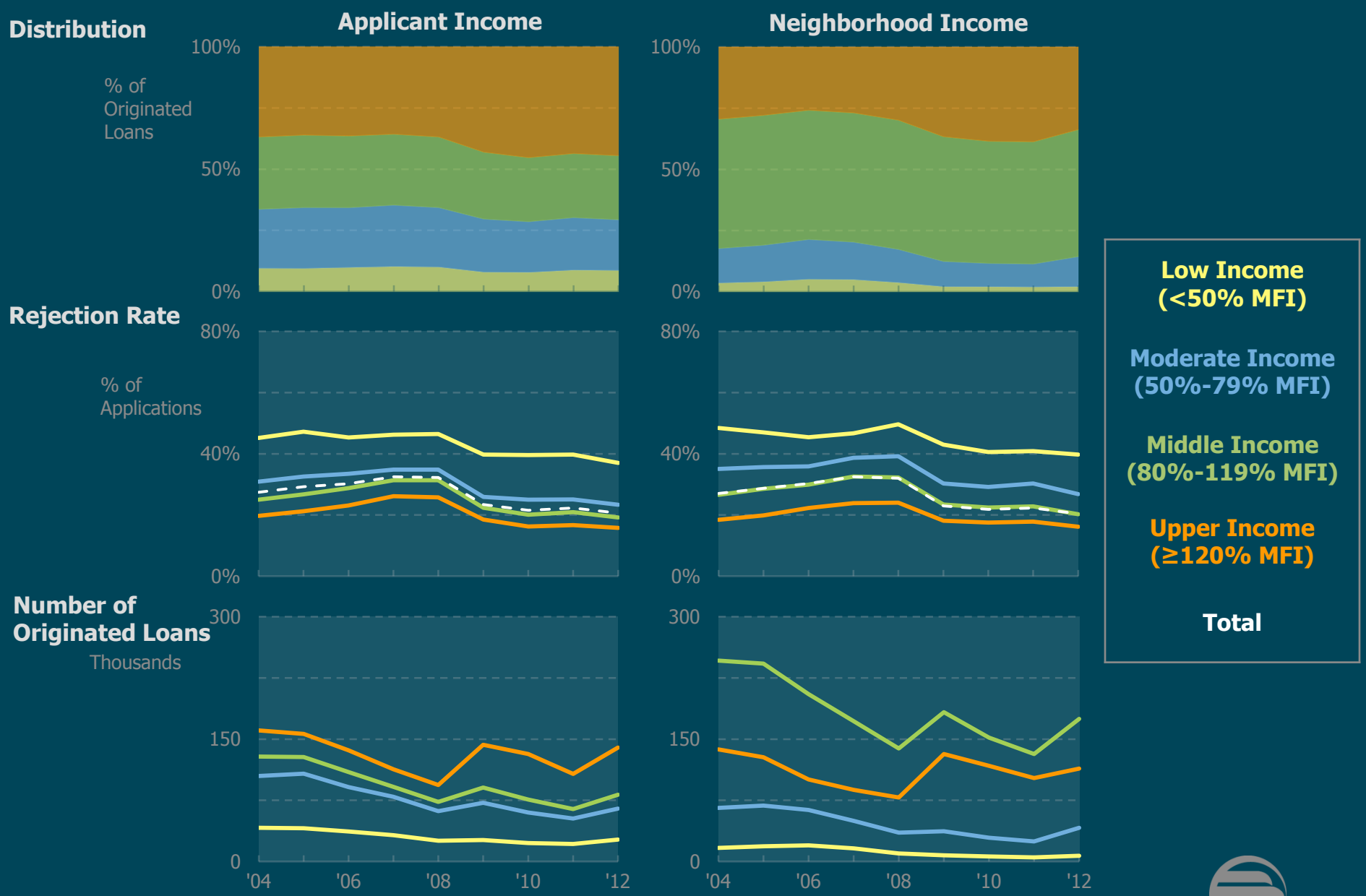
Overview

- This research compares mortgage lending patterns in low- and moderate-income neighborhoods and among low- and moderate-income borrowers with their middle- and upper-income counterparts.
- The study period covers the time leading up to the housing market peak, its subsequent collapse, and its early recovery by presenting data from 2004 to 2012.
- The analysis explores originations and rejection rates for home loans by purpose (e.g., purchase, refinance), type (e.g., conventional, Federal Housing Administration), high-cost lending, oversight by federal regulatory agencies, and lender size.
- Data for 2004-2011 are based on a different set of census tract definitions and a different data set for classifying borrowers and neighborhoods by income than are used in the classification of 2012 data. As a result, the estimates in this analysis for years up to and including 2011 should not be directly compared with the estimates for 2012, because any changes between those time periods may partly reflect changing definitions rather than changes in lending patterns. See the *Documentation for HMDA Analysis* supplement for technical details.

Highlights: Total Lending

- Mortgage lending fell steadily from 2004 to 2008. Despite a halting recovery thereafter, the number of loans originated at the end of the study period was lower than it had been in 2004.
- The decline in the number of originations between 2004 and 2008 was partly attributable to a reduction in the number of applications and partly attributable to rising rejection rates. After 2008, rejection rates fell, and the number of applications began to stabilize.
  - Falling rejection rates after 2008 may be the result of self-selection among applicants, in which weak applicants who would have applied but would have been denied earlier in the study period simply did not apply while the credit market remained tight.
- Among individuals, the share of loans by income status was stable until 2008, after which a greater proportion went to upper-income borrowers.
- Low- and moderate-income neighborhoods had an increasing share of all loans from 2004 to 2006 but subsequently lost share as the volume of originations to those neighborhoods fell at a greater rate than in upper-income neighborhoods. Mortgage originations in 2012 may indicate a slight reversal of this trend, but because the latest year of data is not directly comparable with prior years, it is difficult to know with certainty (see *Documentation for HMDA Analysis* for more detail).
  - When compared with the national totals, the Third District had a greater proportion of loans going to middle-income neighborhoods and a smaller proportion going to upper-income neighborhoods throughout the study period.

Total Lending (Third District)*

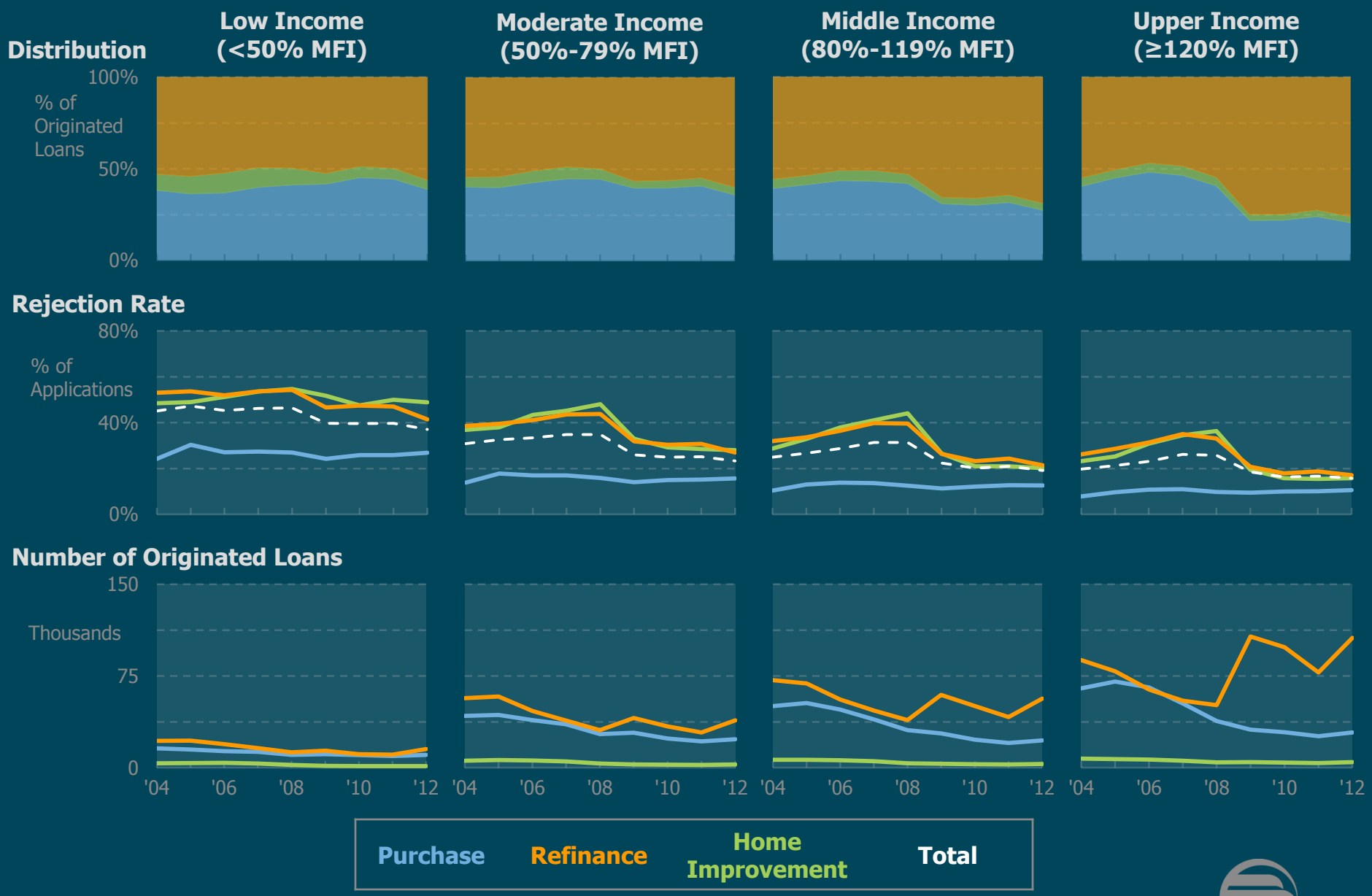


*Estimates reflect first-lien loans for owner-occupied, single-family homes. The 2012 data are not directly comparable with prior years; see documentation for details.
Source: 2004-12, Home Mortgage Disclosure Act data (Federal Financial Institutions Examination Council); prepared by the CDS&E Department at the Federal Reserve Bank of Philadelphia

Highlights: Loan Purpose

- Overall, there was a slight trend toward purchase loans between 2004 and 2006, followed by a dramatic shift toward refinance loans as house prices began to decline and interest rates fell after 2007.
  - The magnitude of this effect was positively correlated with income: The low-income groups were relatively unaffected by the changing market conditions, but the upper-income groups took full advantage of the low rates to refinance existing loans. This occurred for both individuals and neighborhoods.
  - One notable difference between the individual and neighborhood charts is that low-income neighborhoods had a greater proportion of purchase loans than refinances from 2006 to 2010. This was the only group for which refinance loans did not outnumber purchase loans.
- Refinance and home improvement loans were rejected at similar rates and more so than purchase loans. The rates were inversely related to income, with higher rejection rates reported for low-income borrowers and in low-income neighborhoods.
  - Compared with the U.S. as a whole, rejection rates for purchase loans in the Third District were consistently lower across income groups.
- Purchase loan rejection rates were stable through the study period, but refinance and home improvement rejection rates rose through 2008 and dropped sharply thereafter for most income groups.

Loan Purpose by Applicant Income (Third District)*



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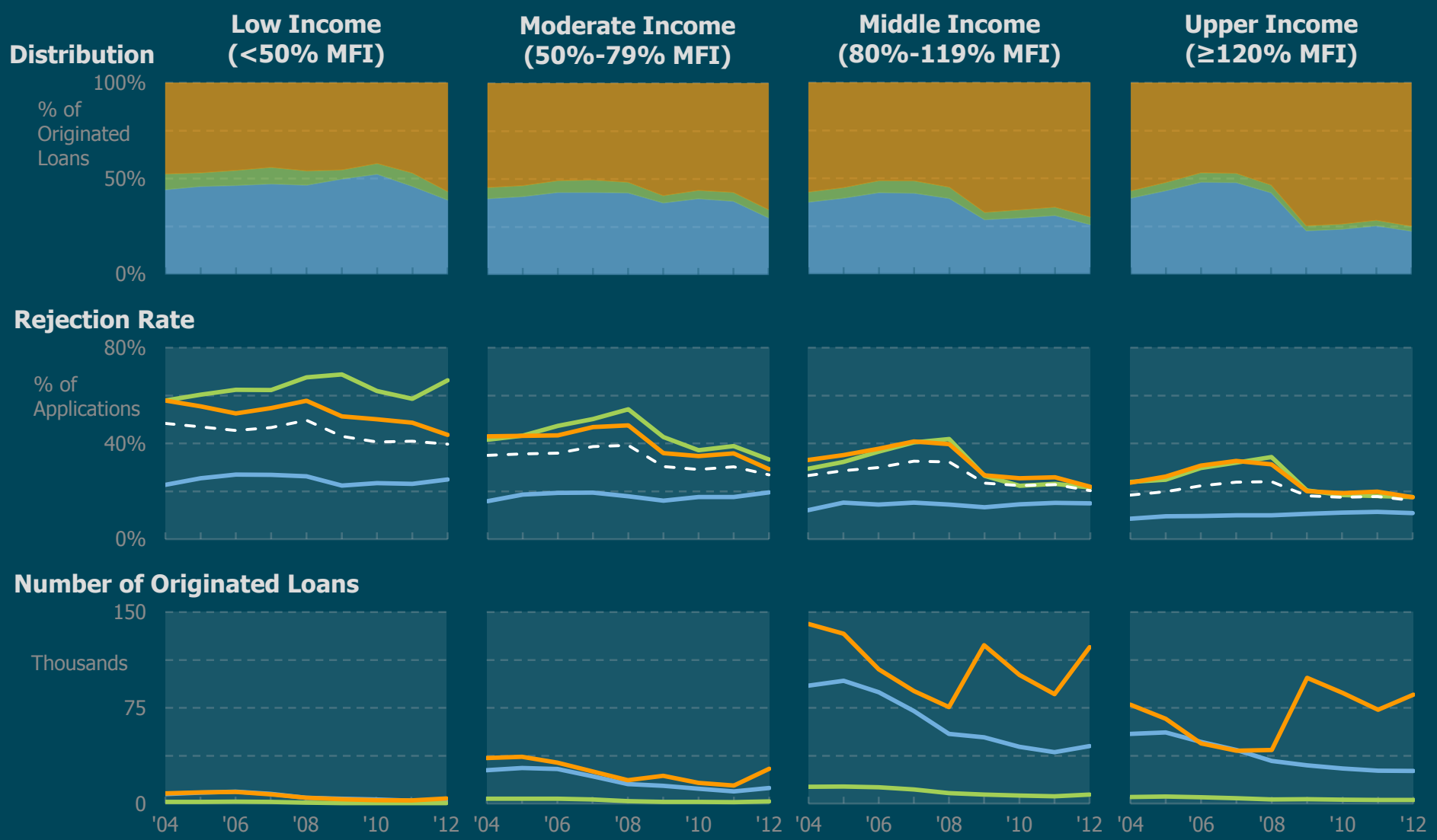
Loan Purpose by Neighborhood Income (Third District)*



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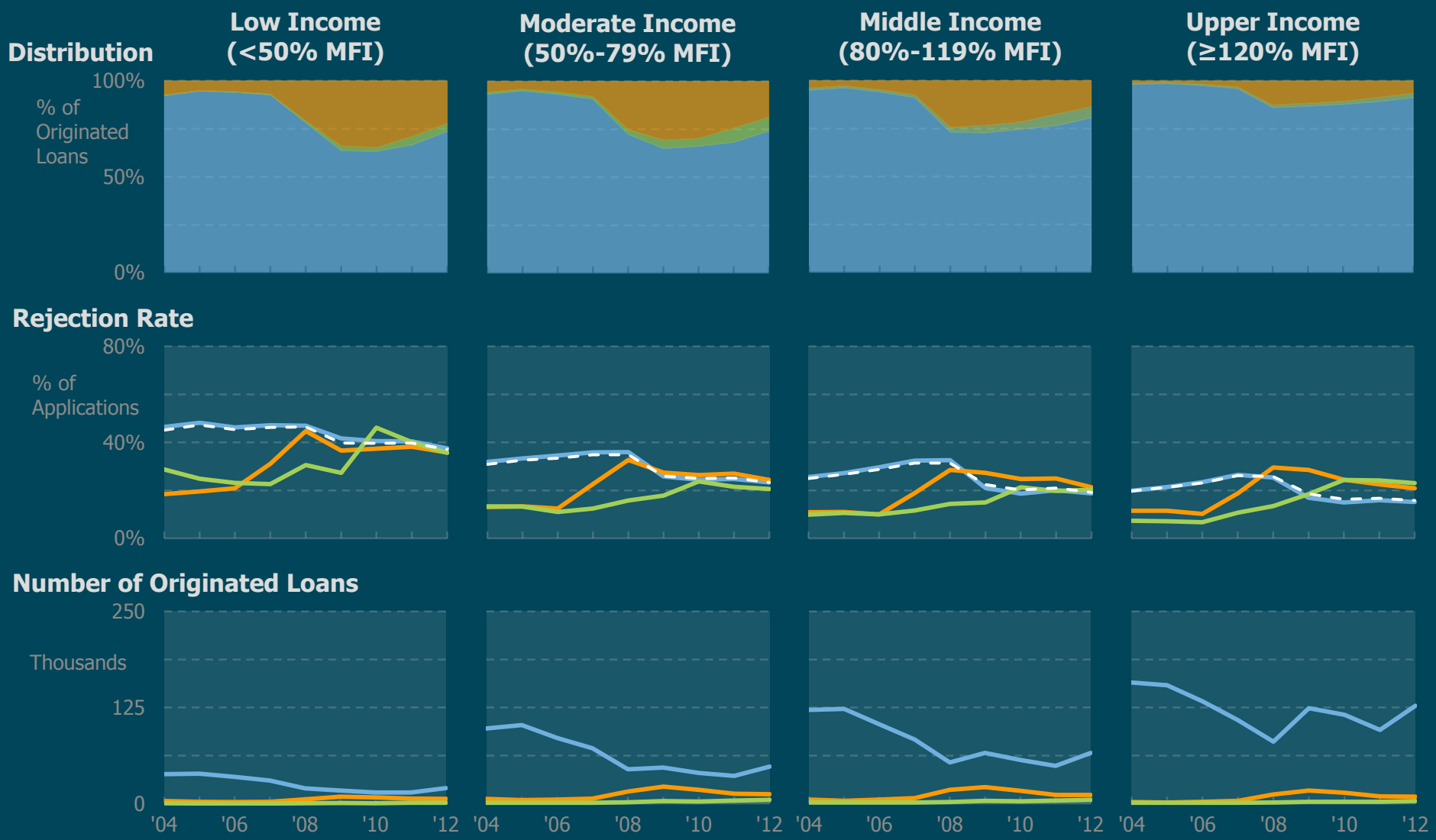
Highlights: Loan Type

- The vast majority of loans were conventional for all income groups through 2007. A precipitous drop in conventional loan share followed as borrowers, particularly in the lower-income groups, switched to loans insured by the Federal Housing Administration (FHA). After 2009, the market began to move back toward conventional loans.
- Borrowers in low-income neighborhoods were the only group for which a majority of loans originated in a given year were insured by the FHA: In 2009 and 2010, 53.9% and 51.9%, respectively, of all loans were FHA backed.
  - This differs from the U.S. as a whole, where conventional loans constitute the majority of loans for all years and all income groups.
- FHA rejection rates climbed between 2006 and 2008, after which the rates fell slightly as FHA provided liquidity to the market to replace restricted conventional lending. Conventional loan rejection rates were stable or increasing slightly through 2008, when they also began to fall. For middle- and upper-income applicants and neighborhoods, FHA rejection rates were higher than those for conventional loans in the second half of the period. However, despite marked differences early in the study period, rejection rates for the three loan types converged over time. In 2012, within most borrower and neighborhood income groups, rejection rates were similar across loan types.
- There was less variation across income groups in rejection rates for government-backed loans than there was for conventional loans.

Loan Type by Applicant Income (Third District)*



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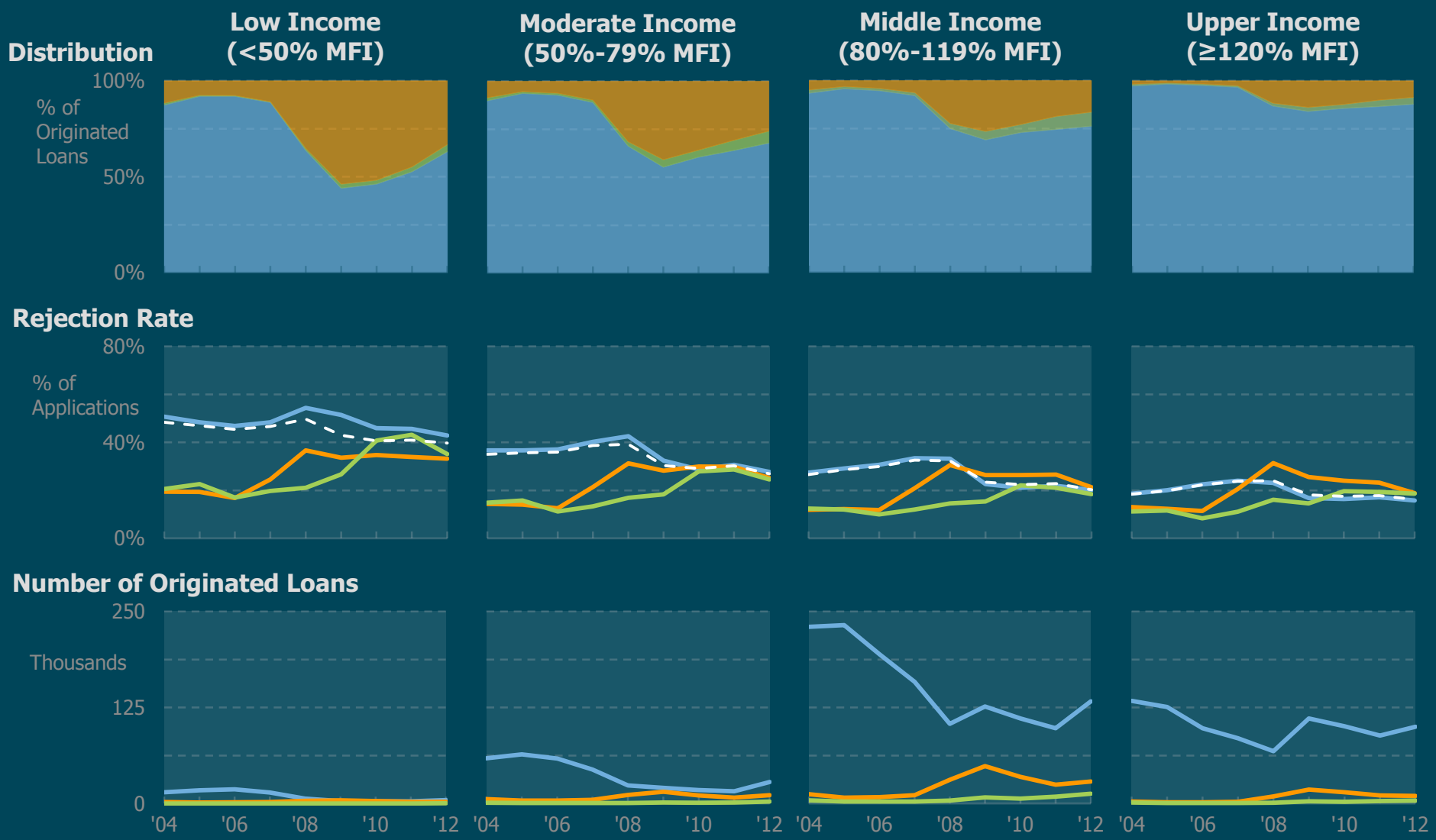
Loan Type by Neighborhood Income (Third District)*



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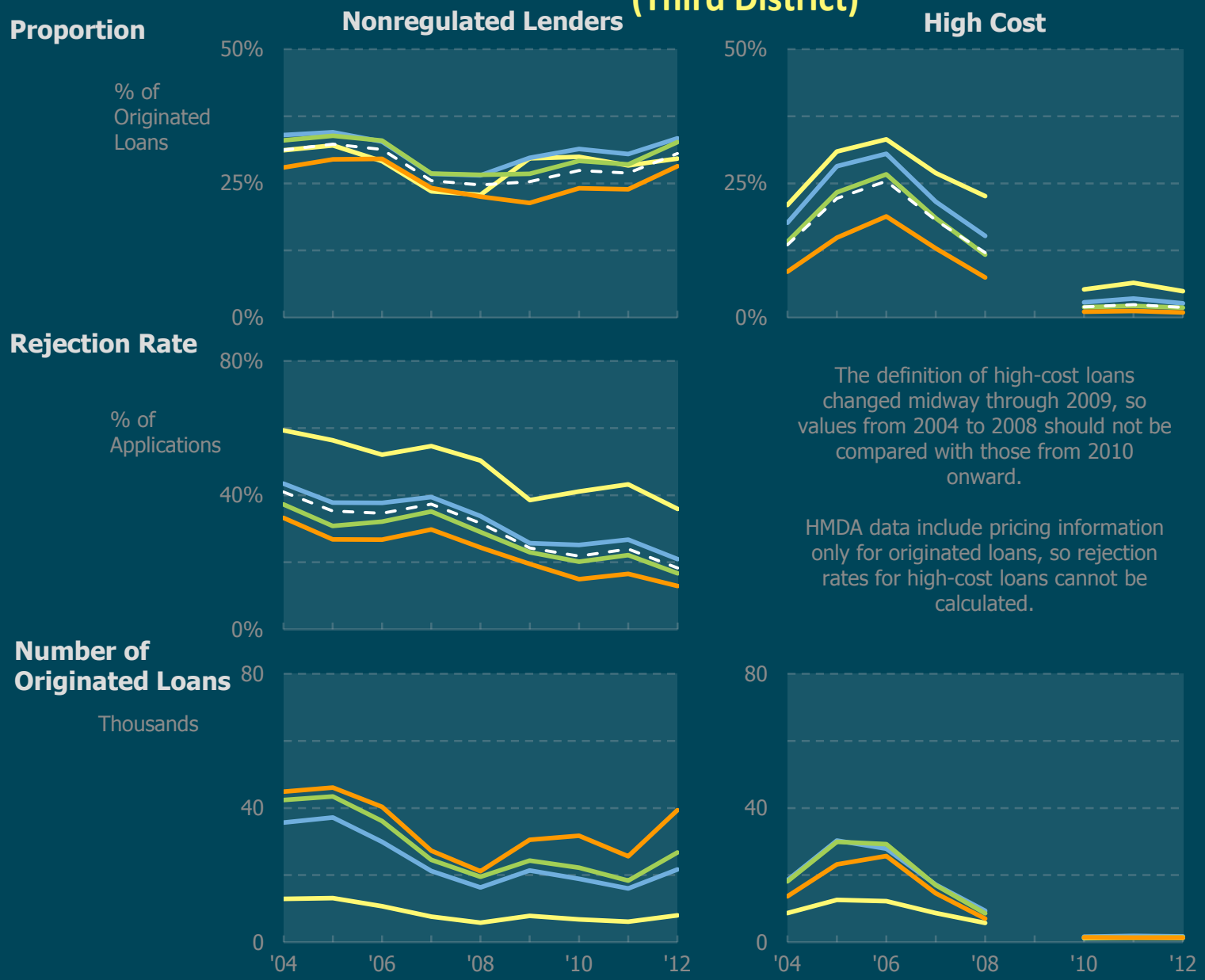
Highlights: Nonregulated Lenders and High-Cost Loans

- Across income groups, the market share of lenders not regulated by a federal agency trended downward from 2005 to 2008. After 2008, there was an overall increase in the number and share of loans originated by nonregulated lenders, driven mostly by upper-income borrowers and loans made in middle-income neighborhoods.
  - Compared with the U.S., all neighborhood income groups in the Third District had a lower proportion of nonregulated loans before the housing market crash. After the crash, the Third District was largely in line with national trends.
- While there was a generally negative relationship between income and the share of loans made by nonregulated lenders, the low-income group did not follow that pattern. Specifically, such loans were less prevalent for the low-income group than for the moderate-income group for almost all years. Also, in 2009, the share of loans originated by nonregulated lenders increased much more rapidly for low-income borrowers and neighborhoods than for the other income groups.
- For all income groups, the rejection rates for loans from nonregulated lenders were initially higher than the rates for loans from regulated lenders, but the two converged through time; by the end of the study period, nonregulated lenders were rejecting at a lower rate than regulated lenders for all groups (rejection rates for loans from regulated lenders not shown).
- High-cost lending rose substantially for all income groups to a peak in 2006, but, by 2008, it had fallen back to levels similar to or below those seen in 2004.
- Among the income categories, the percentage of loans considered high-cost was greatest for the low-income groups. This was true under both definitions of high-cost lending.

* The definition of high-cost loans changed midway through 2009, so values from 2004 to 2008 should not be compared with those from 2010 onward. HMDA data include pricing information only for originated loans, so rejection rates for high-cost loans cannot be calculated.

Loans from Nonregulated Lenders and High-Cost Loans by Applicant Income (Third District)*



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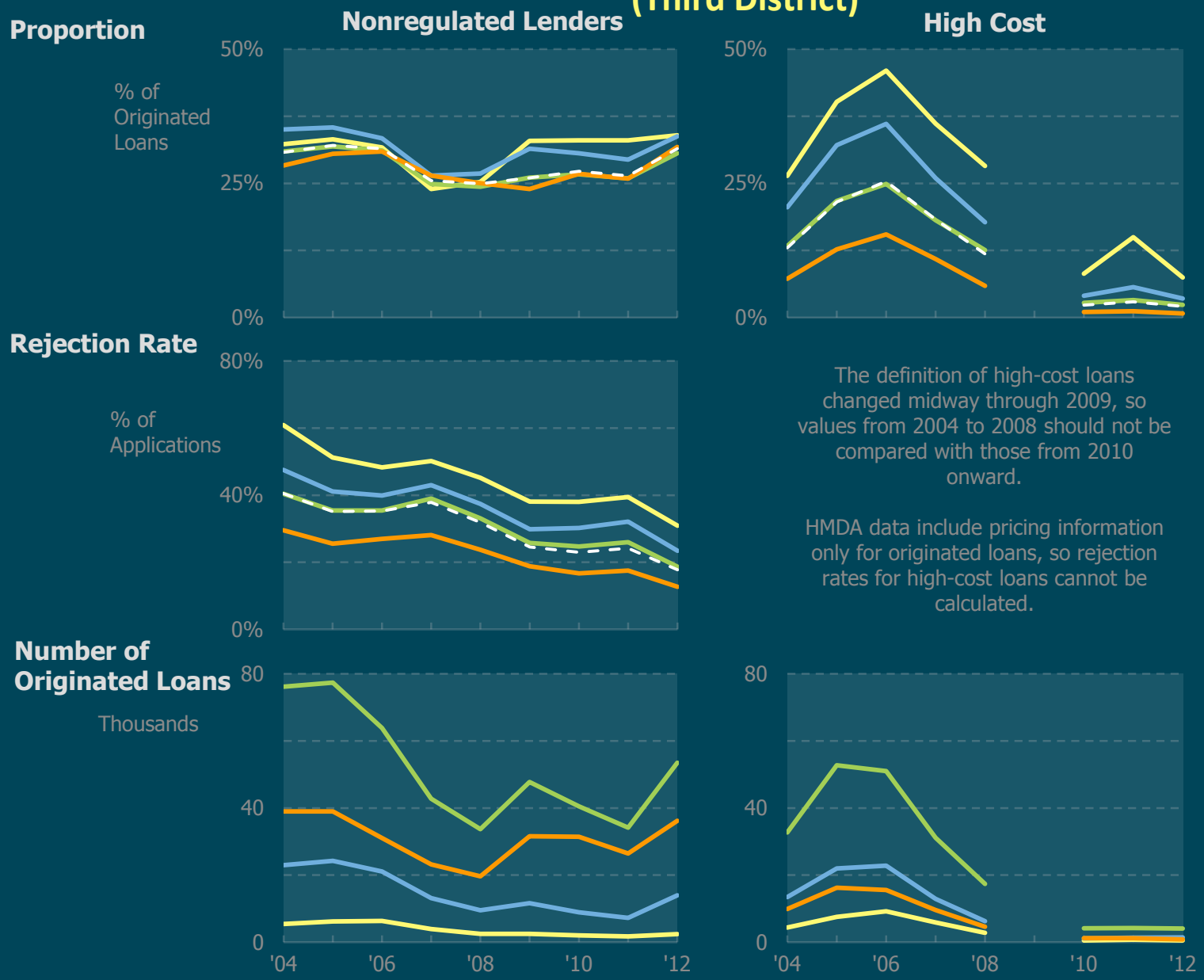
Loans from Nonregulated Lenders and High-Cost Loans by Neighborhood Income (Third District)*



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Low Income (<50% MFI)

Moderate Income (50%-79% MFI)

Middle Income (80%-119% MFI)

Upper Income (≥120% MFI)

Total

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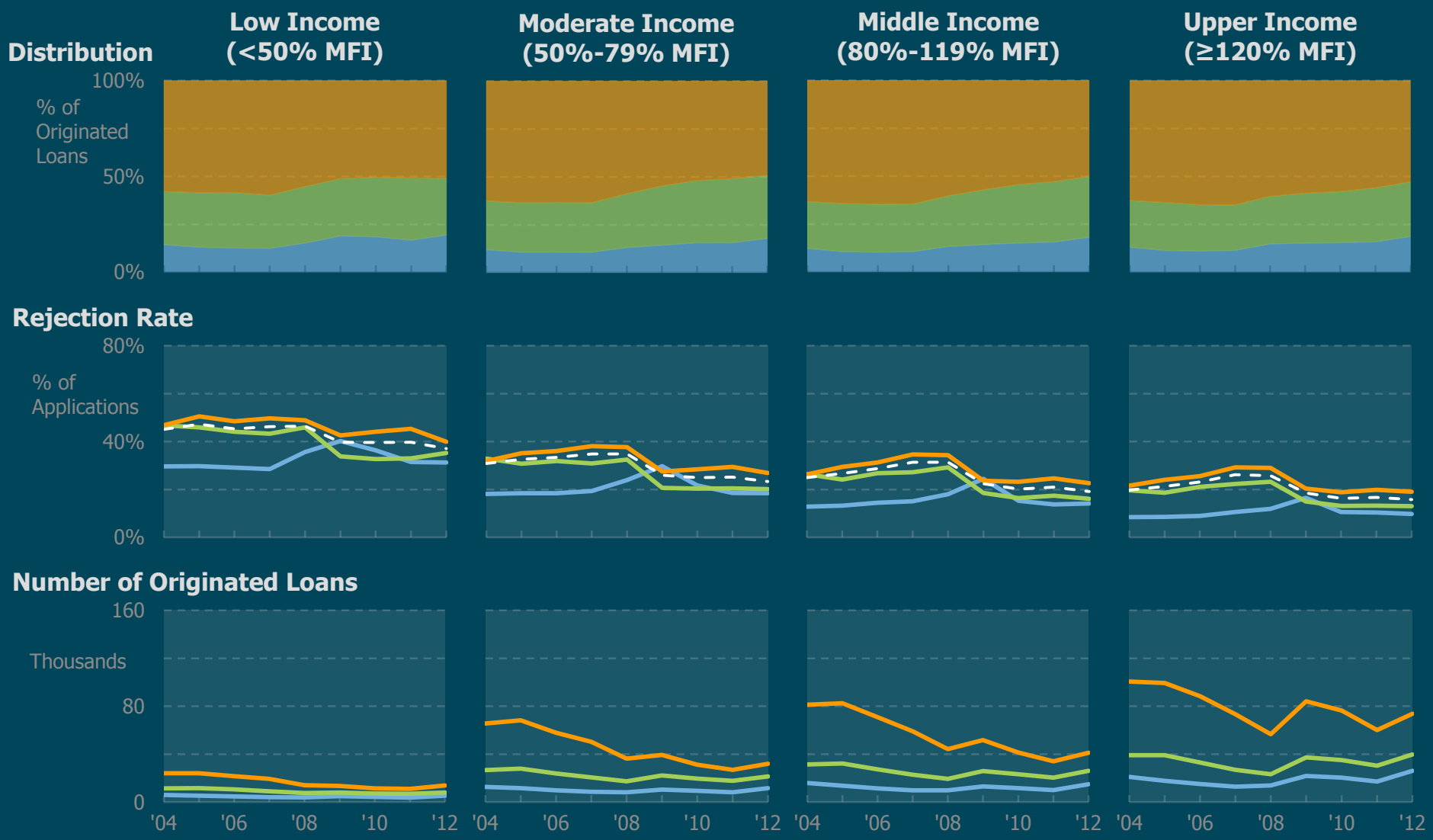
Highlights: Lender Size

- The largest lenders (the top 1% by originations) dominated the market for all income groups throughout the study period. These lenders had a declining market share after 2007 but continued to originate the majority of loans for all income categories.
- Until 2007, the smaller categories of lender size held similar, and stable, market shares. From 2008 onward, however, market share transferred from the largest lenders to their smaller counterparts: There were sharp increases across all income groups for organizations ranked in the 90%-99% range by originations, and slower but noticeable growth for the bottom 89%.
- Generally speaking, market share by lender size varied little across the income groups.
- For the duration of the period, larger lenders typically had higher rejection rates across all income groups, with the exception of 2009 and 2010 when the rates climbed for the bottom 89% group.

Lender Size by Applicant Income (Third District)*



Lenders Ranked by National Number of Originations:

Bottom 89% **90%-99%** **Top 1%** **Total**

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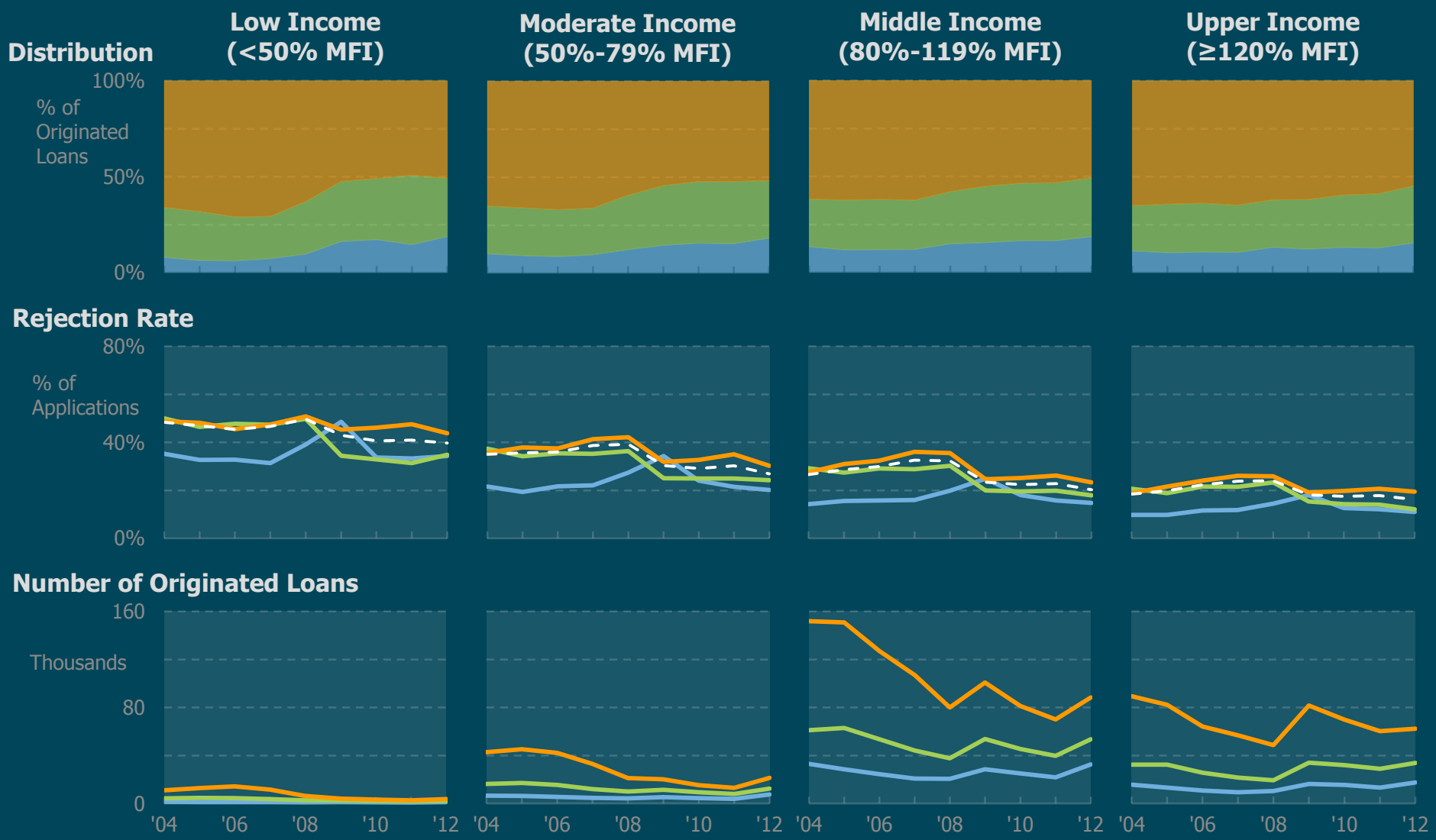
Lender Size by Neighborhood Income (Third District)*



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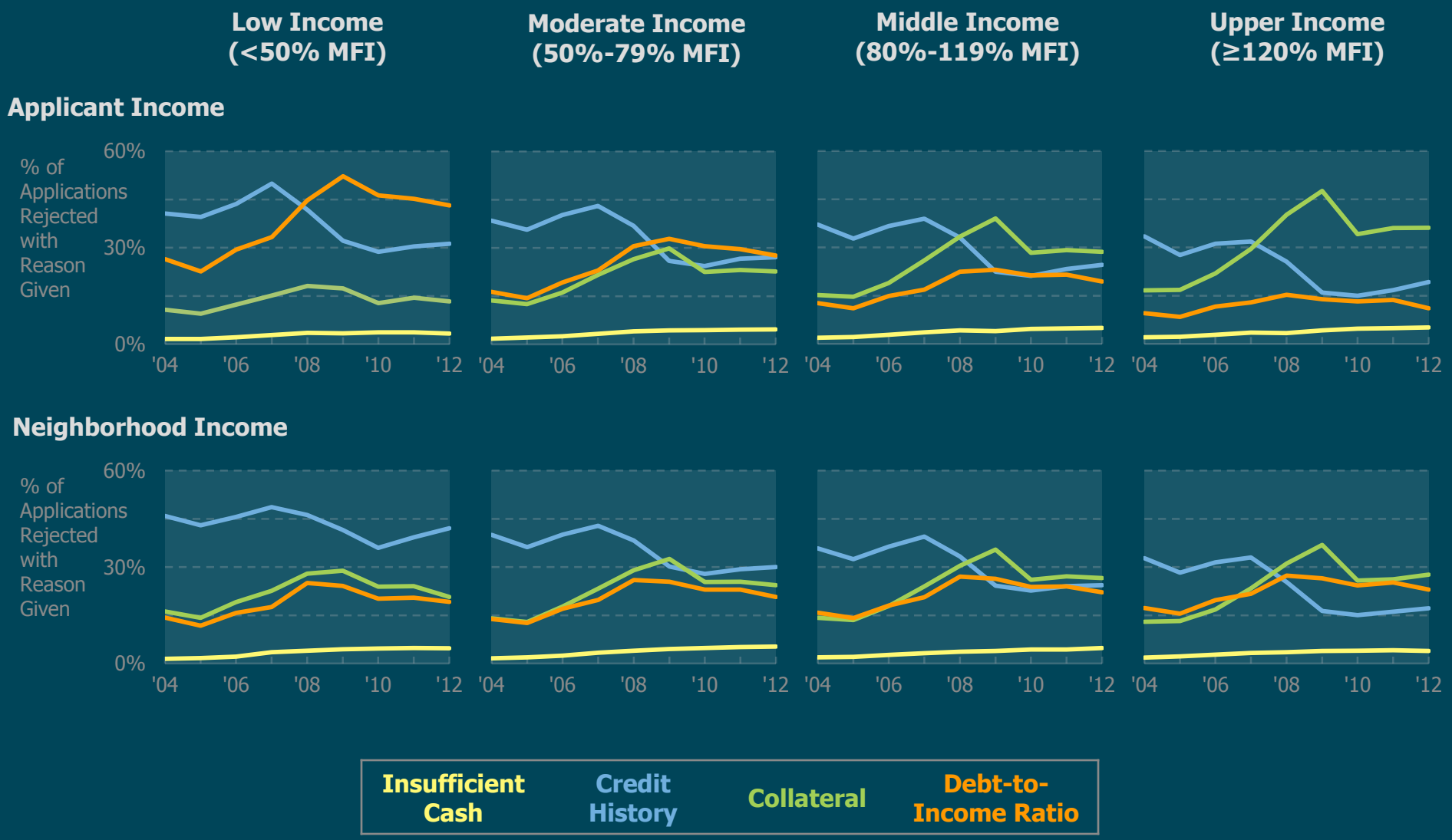
Highlights: Reasons for Rejection

- Credit history was the most often cited reason for rejection until 2007. After 2007, credit history declined in importance as a reason for loan rejections for all income groups but remained the most common reason in low- and moderate-income neighborhoods.
  - This coincides with the generally lower rates of rejection after 2008 and again suggests that less creditworthy applicants may have refrained from applying for mortgages once the market contracted.
  - For low- and moderate-income applicants, credit history was cited much more frequently as a reason for rejection in the Third District than in the U.S. as a whole.
- Among individual applicants, debt-to-income ratio was increasingly cited from 2005 to 2009 and to a greater extent at lower income levels. A similar pattern occurred for collateral at higher income levels.
- The disparity by income group for collateral and debt-to-income ratio was not present at the neighborhood level, where both reasons increased at a similar rate from 2005 to 2008 for all income groups. Although collateral was cited more often in 2009, the gap narrowed later in the period.

Reasons for Rejection (Third District)*



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