CONSUMER FINANCIAL PROTECTION BUREAU | AUGUST 2019

# Data Point: 2018 Mortgage Market Activity and Trends

A First Look at the 2018 HMDA Data

Consumer Financial Protection Bureau

This is another in an occasional series of publications from the Consumer Financial Protection Bureau's Office of Research. These publications are intended to further the Bureau's objective of providing an evidence-based perspective on consumer financial markets, consumer behavior, and regulations to inform the public discourse. See 12 U.S.C. §5493(d).[1]

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# 1. Introduction

The Home Mortgage Disclosure Act (HMDA) is a data collection, reporting, and disclosure statute enacted in 1975. HMDA data are used to assist in determining whether financial institutions are serving the housing needs of their local communities; facilitate public entities' distribution of funds to local communities to attract private investment; and help identify possible discriminatory lending patterns.[1] Institutions covered by HMDA are required to collect and report specified information annually about each mortgage application acted upon and each mortgage purchased during the prior calendar year.[2] The data include the disposition of each application for mortgage credit; the type, purpose, and characteristics of each home mortgage application or purchased loan; the census-tract designations of the properties; loan pricing information; demographic and other information about loan applicants, including their race, ethnicity, sex, and income; and information about loan sales.[3]

Historically, the Federal Reserve Board published a Bulletin article each year focused on how the most recently released HMDA data compared to historical trends. Beginning in 2018, the CFPB assumed responsibility for this function and published a Data Point titled, "Data Point: 2017 Mortgage Market Activity and Trends."

This year, the Bureau is issuing two Data Point articles. This first article focuses specifically on trends in mortgage applications and originations. To make the 2018 HMDA data as comparable as possible to HMDA data from previous years, the Bureau excludes the 2.3 million applications for open-end lines of credit (open-end LOCs) and the 1.1 million records that were dwelling-secured but for a purpose other than purchase, improvement, or refinance, because such records were not reportable prior to 2018. In addition, following the mapping in Appendix A, the Bureau converts all changes to historical (*i.e.*, previously reported) data points attributable to the 2015 HMDA rule back to their historical values, and the agency does not incorporate any of the new HMDA fields into this study.[4] The Bureau's second Data Point article, published concurrently with this Data Point article and titled "Introducing New and Revised Data Points in HMDA:

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[1] For a brief history of HMDA, see Federal Financial Institutions Examination Council, "History of HMDA," available at www.ffiec.gov/hmda/history2.htm.

[2] The 2018 HMDA data, which are the subject of this Data Point, cover mortgage applications acted upon and mortgages purchased during calendar year 2018.

[3] See https://s3.amazonaws.com/cfpb-hmda-public/prod/help/2018-hmda-fig.pdf for a full list of items reported under HMDA for 2018.

[4] See Home Mortgage Disclosure (Regulation C), 80 FR 66128 (Oct. 28, 2015). Also see https://www.consumerfinance.gov/policy-compliance/guidance/hmda-implementation/ for a list of new HMDA fields, as well as additional reference material about recent changes to HMDA reporting.

Initial Observations from New and Revised Data Points in 2018 HMDA" includes analyses of open-end LOCs and dwelling-secured applications not covered here, as well as the new and revised data points added to HMDA under the 2015 rule. [5]

In addition to these Data Point articles, the Bureau is also publishing a static loan-level 2018 HMDA data file that consolidates data from individual reporters. This data file incorporates modifications to the data to protect applicant and borrower privacy.[6] This data file and this Data Point article reflect the data as of August 7, 2019. Though this static consolidated loan-level file will not be changed, the Bureau will separately provide updates to the consolidated loan-level 2018 HMDA data to reflect any later resubmissions or late submissions. Thus, results of analyses using updated consolidated loan-level 2018 data may differ from results reported in this Data Point article. However, the Bureau expects that updated, consolidated loan-level data would produce substantially similar results.

The remainder of this Data Point summarizes the 2018 HMDA data and recent trends in mortgage and housing markets. Some of the key findings are:[7]

- 5,666 institutions reported HMDA data in 2018, down 3.9 percent from the 5,897 which reported in 2017.
- The number of originations of home-purchase loans secured by one-to-four-family properties remained unchanged between 2017 and 2018 at 4.3 million, thus ending a long upward trend in originations going back to 2011.
- The number of refinance originations declined from 2.5 million in 2017 to 1.9 million in 2018.
- The number of reported home improvement loans declined from 549,000 in 2017 to 183,000 in 2018, a drop that resulted primarily from a change in reporting requirements that excluded unsecured home improvement loans.

[5] The second HMDA Data Point article, titled "Introducing New and Revised Data Points in HMDA," is available at https://www.consumerfinance.gov/data-research/research-reports/introducing-new-revised-data-points-hmda/

[6] For more information concerning these modifications and the Bureau's analyses under the balancing test it adopted to protect applicant and borrower privacy while also fulfilling HMDA's disclosure purposes, see 84 FR 649 (January 1, 2019).

[7] For 2018 mortgage lending activities, this Data Point article is based on the analysis of the static consolidated loan-level 2018 HMDA data file made available concurrently to the public. Analyses of prior years' data in this Data Point article are based on *updated* consolidated loan-level HMDA data for prior years, rather than the *static* consolidated loan-level HMDA data initially released to the public for such years. Accordingly, the results herein for prior years' HMDA data may differ somewhat from numbers calculated from the static consolidated loan-level HMDA data initially released for such prior years.

- In total, the number of closed-end originations in 2018 declined 12.6 percent, from 7.4 million in 2017 to 6.4 million in 2018.

- Black borrowers increased their share of home-purchase loans for one-to-four-family, owner-occupied, site-built properties in 2018, the fifth consecutive increase in this share. Approximately 6.7 percent of such loans went to Black borrowers, up from 6.4 percent in 2017. In contrast, 8.9 percent went to Hispanic White borrowers, up slightly from 8.8 percent from 2017. The share of home-purchase loans to low-or-moderate-income (LMI) borrowers increased from 26.3 percent in 2017 to 28.1 percent in 2018.

- Not adjusting for inflation, the average loan amount for first-lien, site-built home-purchase loans secured by one-to-four-family, owner-occupied properties rose 2.6 percent in 2018, to $274,000. The average loan amount for home-purchase loans increased for all racial and ethnic groups between 2017 and 2018. The average home-purchase loan amounts for Asian, Black, and non-Hispanic White borrowers in 2018 were above their previous pre-Recession peaks during 2006–2007. The average loan amount for Hispanic White borrowers approached but remains below the 2006 peak.

- For each racial and ethnic group, the shares of borrowers who took out a nonconventional home purchase loan (that is, a loan with mortgage insurance from the Federal Housing Administration (FHA) or a guarantee from the Department of Veterans Affairs (VA), the Farm Service Agency (FSA), or the Rural Housing Service (RHS)) continued to fall from the years immediately after the Great Recession (2009/2010). Black borrowers and Hispanic White borrowers continued to be much more likely to use nonconventional loans than conventional loans compared with other racial and ethnic groups. In 2018, among those obtaining a first-lien, owner-occupied, one-to-four-family home purchase mortgage, 60.6 percent of Blacks and 48.8 percent of Hispanic Whites took out a nonconventional home-purchase loan as opposed to a conventional home-purchase loan, while 29.7 percent of non-Hispanic Whites and 11.8 percent of Asians did so.

- Nondepository, independent mortgage companies' share of mortgage originations increased sharply from 2010 to 2017. The data for 2018 show only a slight increase. In 2018, this group of lenders accounted for 57.2 percent of first-lien, owner-occupied, site-built home-purchase loans, up from 56.1 percent in 2017. Nondepository, independent mortgage companies also originated 56.1 percent of first-lien, owner-occupied, site-built refinance loans in 2018, an increase from 55.8 percent in 2017, which was the first year in which independent mortgage companies made the majority of such loans since 1995.

# 2. Background on the Bureau's HMDA rulemakings

As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (DFA), Congress amended HMDA to, among other things, expand the number of data points required to be collected and reported, and give the Bureau authority to require additional data points to be collected and reported.[8] The Bureau issued in October 2015, a final rule implementing these and other changes. Most of the rule's provisions took effect on January 1, 2018 and affected data to be collected starting in 2018.[9]

The 2015 HMDA rule made four primary changes to the data collected as of January 1, 2018: 1) mandated reporting of open-end LOCs; 2) changed the transactional coverage definition from loan-purpose-based to one based primarily on whether the loan was secured by a dwelling; 3) modified definitions and values for some existing data points; and 4) required reporting of 27 new data points. The Bureau discusses each of these in turn.

The 2015 HMDA rule changed reporting of open-end LOCs from optional to mandatory. Specifically, institutions that originated at least 100 open-end LOCs in each of the two preceding calendar years would have been required to report data on open-end LOCs beginning with data collected in 2018 and reported in 2019. However, this reporting threshold has not gone into effect, because in 2017, the Bureau temporarily increased the open-end reporting threshold to 500 open-end LOCs for calendar years 2018 and 2019. In the 2018 HMDA data, 1,029 financial institutions reported 2.3 million applications for open-end LOCs and 1.1 million associated originations.

In the 2015 HMDA rule, the Bureau also modified the types of transactions subject to Regulation C. The final rule adopted a dwelling-secured standard for all loans or open-end LOCs that are for personal, family, or household purposes. Thus, most consumer-purpose transactions, including closed-end home-equity loans, home-equity LOCs (HELOCs), and

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[8] On July 21, 2011, rulemaking responsibility for HMDA was transferred from the Federal Reserve Board to the newly established Consumer Financial Protection Bureau. The federal HMDA agencies (OCC, FDIC, FRB, NCUA, and CFPB) agreed that, beginning January 1, 2018, HMDA reporters would file their HMDA data with the Bureau, which would process it and facilitate public access on behalf of the agencies and the Federal Financial Institutions Examination Council (FFIEC; www.ffiec.gov).

[9] See Home Mortgage Disclosure (Regulation C), 80 FR 66128 (Oct. 28, 2015). In September 2017, the Bureau published in the Federal Register a rule which made a number of technical corrections to and clarified certain requirements of the rule implementing HMDA. This rule also increased the threshold for collecting and reporting data about open-end LOCs for a period of two years. See 82 FR 43088 (Sep. 13, 2017).

reverse mortgages, are subject to the regulation. For commercial-purpose transactions (*i.e.*, loans or LOCs not for personal, family, or household purposes), the 2015 HMDA rule revised the coverage criteria so that such transactions must be reported if they are secured by a dwelling and for the purpose of home purchase, home improvement, or refinancing. The final rule also excludes from coverage home improvement loans that are not secured by a dwelling (*i.e.*, home improvement loans that are unsecured or that are secured by some other type of collateral) and all agricultural-purpose loans and LOCs.

The 2018 HMDA data include just under 1.1 million records that were dwelling-secured, but had a loan purpose other than home purchase, home improvement, or refinance. Approximately 508,000 of these records (44.9 percent) were originated loans. All of these applications and originations are newly covered under HMDA following the 2015 HMDA rule's changes to the transactional coverage criteria. It is difficult to assess the volume of non-dwelling secured home purchase, home improvement, and refinance applications and originations that were newly excluded by these changes, because the universe of these transactions is unknown.

In addition to changes in transactional coverage, the 2015 HMDA rule also modified the definitions and values of several pre-existing data points to align them with industry standards and to improve their value for meeting the three statutory purposes of HMDA.[10] For example, the occupancy type data point, which previously captured whether the property was owner-occupied or non-owner-occupied, was changed to capture whether the property was a primary residence, secondary residence, or investment property. As a second example, property type, which previously captured whether the property was one-to-four-family, manufactured home, or multi-family, was changed into two data fields: 1) construction method (whether the property was site built or a manufactured home) and 2) total units. Appendix A presents all of the historical data points, along with a summary of all changes the 2015 HMDA rule made to these data points.

Finally, the 2015 HMDA rule required reporting of an additional 27 data points. Thirteen of these were required by the DFA and include such items as credit score, loan term, and property value. The Bureau added 14 data points—including such items as interest rate, discount points, debt-to-income ratio, and combined loan-to-value ratio—using its discretionary authority under the DFA. Appendix B lists all of the additional data points, along with an indication of whether they were required by the DFA or added pursuant to the Bureau's discretionary authority. In May 2019, the Bureau published an ANPR seeking public comment on whether the Bureau

[10] The three statutory purpose of HMDA are to provide the public with information that will help show whether financial institutions are serving the housing credit needs of the communities and neighborhoods in which they are located, aid public officials in distributing public sector investment so as to attract private investment to areas where it is needed, and assist in identifying possible discriminatory lending patterns and enforcing antidiscrimination statutes.

should reconsider requiring the submission of information about these 14 permissive data points and other information.

In addition to the 2015 HMDA rule, the Bureau also finalized an interpretive and procedural rule in August 2018, which clarified and implemented Section 104(a) of the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA).[11] Beginning with 2018 HMDA data, the EGRRCPA exempted certain insured depository institutions (DIs) and insured credit unions from the requirement to collect and report data on 26 of the 27 new data points added under the 2015 HMDA rule for certain transactions (see Appendix B). Age was the only new data point not covered by the EGRRCPA partial exemptions. Because this Data Point article focuses on trends in historical data points, not on the new data points, changes to reporting requirements in response to changes made to implement EGRRCPA do not affect the results presented here. The Bureau's second Data Point article, published concurrently with this Data Point article and titled "Introducing New and Revised Data Points in HMDA: Initial Observations from New and Revised Data Points in 2018 HMDA"[12], which focuses on the new and revised data points, discusses the impact of the EGRRCPA in more detail.

[11] Partial Exemptions from the Requirements of the Home Mortgage Disclosure Act Under the Economic Growth, Regulatory Relief, and Consumer Protection Act (Regulation C), 83 FR 45325 (Sept. 7, 2018).
[12] Available at available at https://www.consumerfinance.gov/data-research/research-reports/introducing-new-revised-data-points-hmda/.

# 3. HMDA data coverage of the mortgage market

HMDA data are the most comprehensive source of publicly-available information on the U.S. mortgage market, and the only publicly available source of nationwide application-level data on the supply and demand for mortgage credit. Given that mortgage debt is by far the largest component of household debt in the United States, these data have been extensively used for research and supervisory work, as well as for public policy deliberations related to the mortgage market.

Although HMDA data are the most extensive application-level data on residential mortgage lending in the United States, they do not cover the entire mortgage market. Among DIs, the smallest institutions, institutions without any branches in a metropolitan statistical area (MSA), and institutions that are not federally insured or regulated or do not make loans insured by a Federal agency or intended for sale to Fannie Mae or Freddie Mac, do not have to report HMDA data. The 2015 HMDA rule's changes to institutional coverage criteria for closed-end loans took effect in 2017 and raised the reporting threshold from one covered origination to 25 covered originations for DIs. These changes thus further increased the number of exempted DIs.[13] Among nondepository institutions, smaller institutions, institutions that make few mortgage loan originations, and those that operate entirely outside of an MSA, also do not have to report HMDA data.[14]

To assess HMDA's overall coverage of the mortgage market, the Bureau first estimates the universe of mortgage lenders and the number of mortgage originations by all lenders regardless of whether they are HMDA reporters.[15] The estimate uses data from the HMDA data, the Bank/Thrift and Credit Union Call Reports, and other data sources. This analysis focuses solely

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[13] For reporting of open-end LOCs, the 2015 HMDA rule established institutional coverage thresholds of at least 100 open-end LOCs in each of the two preceding calendar years. In a rule finalized in August 2017, the Bureau temporarily increased the open-end threshold to 500 open-end LOCs for two years.

[14] This section describes HMDA coverage applicable at the time the data discussed here were reported. At the time the data discussed here were reported, depositories with less than $45 million in assets or less than 25 covered, closed-end originations in either of the last two years, and nondepositories with less than 25 covered, closed-end originations in either of the last two years were not required to report closed-end data under HMDA. For additional details, see Federal Financial Institutions Examination Council (2018), "A Guide to HMDA Reporting: Getting It Right!" available at https://www.ffiec.gov/hmda/guide.htm.

[15] Note for the discussion in this section, the Bureau defines the universe of mortgages in line with the transactional coverage criteria under HMDA applicable at the time the 2018 HMDA data discussed here were collected.

on closed-end mortgages; the universe of open-end reporters are analyzed in the second Data Point article. For financial institutions that did not report HMDA data in a given year but reported relevant mortgage activity to one of these alternative sources, the Bureau employed a number of different estimation approaches. For example, for credit unions that did not report HMDA data, the agency examined their year-to-date closed-end loan origination volumes reported at the end of the year to Credit Union Call Reports. In doing so, the Bureau used only the categories of mortgage loans under the Credit Union Call Reports that are the same as the transactional coverage requirements governing the 2018 HMDA data.[16] For banks and thrifts that did not report under HMDA, the Call Reports contain information only on the end-of-period balance of the mortgages on their books, but not on the origination volumes within the reporting period. For those institutions, the Bureau developed a set of econometric models, first estimating the relationships between annual originations and the end-of-year balances.[17] These models control for an array of institutional characteristics, such as assets, institution type, number of employees, and number of branches in MSAs. The Bureau then applied this estimated relation to the characteristics of non-HMDA reporters to estimate their closed-end mortgage origination volumes.[18]

Based on this analysis, the Bureau estimates that approximately 11,800 institutions originated at least one closed-end mortgage loan in 2018, with a total origination volume of approximately 7.3 million loans.[19] These estimates are slightly lower than for 2017 when the Bureau estimated 12,000 total institutions with an origination volume of 7.9 million loans. The 2018 HMDA data contained closed-end data from a total of 5,666 institutions. Although this is lower than the

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[16] For instance, these estimates include mortgage loans regardless of lien status but do not include open-end LOCs, which will be considered in the second Data Point article. They also do not differentiate whether borrowers are natural persons or not.

[17] The Bureau assumes the dependent variable (the number of mortgage originations for each institution) follows a Poisson distribution, and that the logarithm of its expected value can be modeled by a linear combination of unknown parameters. In other words, the Bureau estimated Poisson regressions.

[18] Alternatively one might compare the number of loans reported under HMDA with the number of loans reported in consumer credit files maintained by nationwide consumer reporting agencies (NCRAs); such was the case in Bhutta, Neil, Steven Laufer, and Daniel R. Ringo, "Residential Mortgage Lending in 2017: Evidence from the Home Mortgage Disclosure Act Data," Federal Reserve Bulletin Vol. 103, No. 6 (Nov 2017), available at https://www.federalreserve.gov/publications/files/2017_HMDA.pdf. However, there are disadvantages in using NCRA data to estimate the total universe of mortgage originations, including a lag between the time when a mortgage is originated and when the information on the mortgage tradeline is first reported to the credit bureaus and potential duplication and transactional coverage issues. For our purposes, the estimates reported from NCRAs do not allow the breakdown of the origination volumes by the origination entities; hence, unlike the methodology the Bureau develops and presents in this section, the Bureau cannot use NCRA origination volumes to estimate the impact of the regulation change at the institution level.

[19] Approximately 2,600 of the 11,700 institutions that originated at least one closed-end mortgage loan in 2018 were banks and thrifts that did not report HMDA data, and therefore required estimates of origination volumes. In total, the Bureau estimates the origination volume of these institutions in 2018 was approximately 190,000.

5,897 institutions that reported in 2017, the percentage of total institutions that reported under HMDA was similar in each year (49 percent in 2017 vs. 48 percent in 2018). In 2018, HMDA reporters originated about 6.4 million loans or just under 90 percent of the estimated total number of closed-end originations in the United States. In 2017, HMDA reporters originated about 7.3 million loans or approximately 90 percent of the estimated number of originations in the United States. [20]

[20] Calculations in the text are based on precise data values. Using rounded numbers from the printed tables may lead to different values due to rounding error.

# 4. Mortgage applications and originations

In 2018, a total of 5,683 financial institutions—banks, savings associations, credit unions, and nondepository mortgage lenders—reported data on 12.9 million applications and 7.7 million originations under HMDA. To make the data as consistent as possible with historical HMDA data, the Bureau excludes all open-end LOCs, except those open-end LOCs that are reverse mortgages, and applications for a loan purpose other than purchase, home improvement, or refinance. These exclusions reduce the number of HMDA reporters by 17 to 5,666.[21] Unless specifically noted, the remainder of the article will focus on these 5,666 financial institutions to facilitate comparability of HMDA data over time. These 5,666 financial institutions reported HMDA data on approximately 10.3 million home mortgage applications. This total includes approximately 2.0 million applications that the lender closed as incomplete or the applicant withdrew before the lender made a decision. In total, lenders reported approximately 6.4 million originations, down from 7.4 million originations in 2017 (Table 1).[22]

Refinance loans for one-to-four-family properties declined by approximately 583,000, or 23.1 percent from 2017 to 2018. Applications for refinance mortgages also declined from 4.9 million in 2017 to 3.8 million in 2018. Using a change to loan purpose reporting in the 2015 HMDA rule that breaks out cash-out refinance loans from other refinance loans, just under 56.3 percent of refinance loans were cash-out refinances. The increase in interest rates was likely a main driver of the decline in refinance applications and refinance mortgages. Although still low by historical standards, average interest rates increased throughout 2018 and were generally higher in 2018 than 2017. The average rate on 30-year fixed rate conventional conforming mortgage loans made to prime borrowers started at 3.95 percent at the beginning of 2018 and increased to 4.94 percent by mid-November before dropping back to 4.55 percent by the end of 2018. In contrast,

[21] The 2015 HMDA rule change that eliminated reporting of unsecured home improvement loans was one reporting change the Bureaus was unable to make consistent over time. When applicable, results prior to 2018 include unsecured home improvement loans, but results for 2018 do not.

[22] Versions of Table 1 containing loan counts and total dollar volume by month are available in the Excel file available at https://www.consumerfinance.gov/data-research/research-reports/cfpb-data-point-mortgage-market-activity-and-trends/.

**TABLE 1:** APPLICATIONS AND ORIGINATIONS (IN THOUSANDS), SHARE OF ONE-TO-FOUR-FAMILY SITE-BUILT, NONCONVENTIONAL LOAN ORIGINATIONS (PERCENT), AND PRE-APPROVALS AND LOAN PURCHASES (IN THOUSANDS)

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-4 FAMILY | | | | | | | | | | | | | | | |
| *Home purchase* | | | | | | | | | | | | | | | |
| Applications(1) | 9,804 | 11,685 | 10,929 | 7,609 | 5,060 | 4,217 | 3,848 | 3,650 | 4,023 | 4,586 | 4,679 | 5,196 | 5,694 | 6,036 | 6,069 |
| Originations | 6,437 | 7,391 | 6,740 | 4,663 | 3,139 | 2,793 | 2,547 | 2,430 | 2,742 | 3,139 | 3,248 | 3,676 | 4,046 | 4,251 | 4,262 |
| First lien, owner occupied | 4,789 | 4,964 | 4,429 | 3,454 | 2,628 | 2,455 | 2,219 | 2,073 | 2,343 | 2,703 | 2,815 | 3,210 | 3,544 | 3,699 | 3,707 |
| Site-built, conventional | 4,107 | 4,425 | 3,912 | 2,937 | 1,581 | 1,089 | 1,006 | 999 | 1,251 | 1,630 | 1,741 | 1,899 | 2,123 | 2,297 | 2,410 |
| Site-built, nonconventional | 553 | 411 | 386 | 394 | 951 | 1,302 | 1,152 | 1,019 | 1,033 | 1,007 | 1,006 | 1,235 | 1,340 | 1,309 | 1,186 |
| FHA share (%) | 74.6 | 68.6 | 66.0 | 65.8 | 78.9 | 77.0 | 77.4 | 70.9 | 68.0 | 62.8 | 58.3 | 64.6 | 64.6 | 62.3 | 60.2 |
| VA share (%) | 21.6 | 26.7 | 29.0 | 27.1 | 15.2 | 13.9 | 15.2 | 18.2 | 19.9 | 24.2 | 28.3 | 26.0 | 26.9 | 28.7 | 31.2 |
| FSA/RHS share (%) | 3.9 | 4.7 | 5.0 | 7.1 | 5.9 | 9.0 | 7.4 | 10.9 | 12.0 | 13.1 | 13.3 | 9.4 | 8.5 | 9.1 | 8.6 |
| Manufactured, conventional | 106 | 100 | 101 | 95 | 68 | 43 | 45 | 40 | 44 | 51 | 51 | 56 | 59 | 67 | 80 |
| Manufactured, nonconventional | 24 | 27 | 30 | 29 | 28 | 21 | 17 | 15 | 14 | 14 | 16 | 20 | 22 | 26 | 31 |
| First lien, non-owner occupied | 857 | 1,053 | 880 | 607 | 412 | 292 | 285 | 314 | 355 | 388 | 378 | 406 | 435 | 472 | 470 |
| Junior lien, owner occupied | 738 | 1,224 | 1,269 | 552 | 93 | 44 | 42 | 41 | 43 | 46 | 53 | 58 | 65 | 79 | 83 |
| Junior lien, non-owner occupied | 53 | 150 | 162 | 50 | 6 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| *Refinance* | | | | | | | | | | | | | | | |
| Applications(1) | 16,085 | 15,907 | 14,046 | 11,566 | 7,805 | 9,983 | 8,437 | 7,422 | 10,526 | 8,564 | 4,526 | 5,957 | 7,187 | 4,949 | 3,832 |
| Originations | 7,591 | 7,107 | 6,091 | 4,818 | 3,491 | 5,772 | 4,971 | 4,330 | 6,668 | 5,141 | 2,370 | 3,234 | 3,759 | 2,523 | 1,941 |
| First lien, owner occupied | 6,497 | 5,770 | 4,469 | 3,659 | 2,934 | 5,301 | 4,519 | 3,856 | 5,930 | 4,393 | 2,001 | 2,847 | 3,375 | 2,207 | 1,662 |
| Site-built, conventional | 6,115 | 5,541 | 4,287 | 3,407 | 2,363 | 4,264 | 3,837 | 3,315 | 4,971 | 3,634 | 1,608 | 2,155 | 2,529 | 1,635 | 1,247 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Site-built, nonconventional | 297 | 151 | 110 | 180 | 506 | 979 | 646 | 508 | 917 | 715 | 363 | 661 | 812 | 541 | 384 |
| FHA share (%) | 68.3 | 77.3 | 87.5 | 91.5 | 92.2 | 83.7 | 79.3 | 63.2 | 61.2 | 61.2 | 47.6 | 59.6 | 49.5 | 53.3 | 55.4 |
| VA share (%) | 31.4 | 22.4 | 12.3 | 8.3 | 7.6 | 15.9 | 20.3 | 35.9 | 37.8 | 37.6 | 51.9 | 40.2 | 50.1 | 46.0 | 44.3 |
| FSA/RHS share (%) | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.4 | 0.4 | 0.9 | 0.9 | 1.2 | 0.5 | 0.3 | 0.4 | 0.8 | 0.3 |
| Manufactured, conventional | 77 | 70 | 60 | 56 | 42 | 36 | 25 | 25 | 31 | 32 | 22 | 21 | 20 | 19 | 20 |
| Manufactured, nonconventional | 7 | 8 | 12 | 16 | 22 | 22 | 10 | 9 | 11 | 12 | 8 | 10 | 14 | 13 | 10 |
| First lien, non-owner occupied | 618 | 582 | 547 | 474 | 330 | 350 | 359 | 394 | 660 | 673 | 310 | 329 | 329 | 253 | 206 |
| Junior lien, owner occupied | 464 | 729 | 1,036 | 661 | 219 | 115 | 88 | 74 | 73 | 70 | 55 | 55 | 52 | 60 | 69 |
| Junior lien, non-owner occupied | 13 | 25 | 39 | 23 | 9 | 7 | 6 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 3 |
| *Home improvement* | | | | | | | | | | | | | | | |
| Applications | 2,200 | 2,544 | 2,481 | 2,218 | 1,413 | 832 | 671 | 675 | 779 | 833 | 846 | 926 | 1,005 | 1,054 | 350 |
| Originations | 964 | 1,096 | 1,140 | 958 | 573 | 390 | 342 | 335 | 382 | 425 | 411 | 477 | 536 | 549 | 183 |
| MULTIFAMILY[1] | | | | | | | | | | | | | | | |
| Applications | 61 | 58 | 52 | 54 | 43 | 26 | 26 | 35 | 47 | 51 | 46 | 52 | 50 | 48 | 62 |
| Originations | 48 | 45 | 40 | 41 | 31 | 19 | 19 | 27 | 37 | 40 | 35 | 41 | 40 | 38 | 51 |
| **Total applications** | **28,151** | **30,193** | **27,508** | **21,448** | **14,320** | **15,057** | **12,981** | **11,782** | **15,375** | **14,034** | **10,097** | **12,132** | **13,937** | **12,086** | **10,314** |
| **Total originations** | **15,040** | **15,638** | **14,011** | **10,480** | **7,234** | **8,974** | **7,879** | **7,122** | **9,828** | **8,744** | **6,064** | **7,428** | **8,381** | **7,361** | **6,437** |
| Memo | | | | | | | | | | | | | | | |
| Purchased Loans | 5,142 | 5,868 | 6,236 | 4,821 | 2,935 | 4,301 | 3,231 | 2,939 | 3,163 | 2,788 | 1,800 | 2,126 | 2,232 | 2,089 | 1,757 |
| Requests for preapproval[2] | 1,068 | 1,260 | 1,175 | 1,065 | 735 | 559 | 440 | 429 | 474 | 474 | 496 | 531 | 514 | 485 | 467 |
| Requests for preapproval that were approved but not acted on | 167 | 166 | 189 | 197 | 99 | 61 | 53 | 55 | 64 | 69 | 64 | 63 | 60 | 36 | 75 |
| Requests for preapproval that were denied | 171 | 231 | 222 | 235 | 177 | 155 | 117 | 130 | 149 | 123 | 125 | 115 | 115 | 107 | 102 |

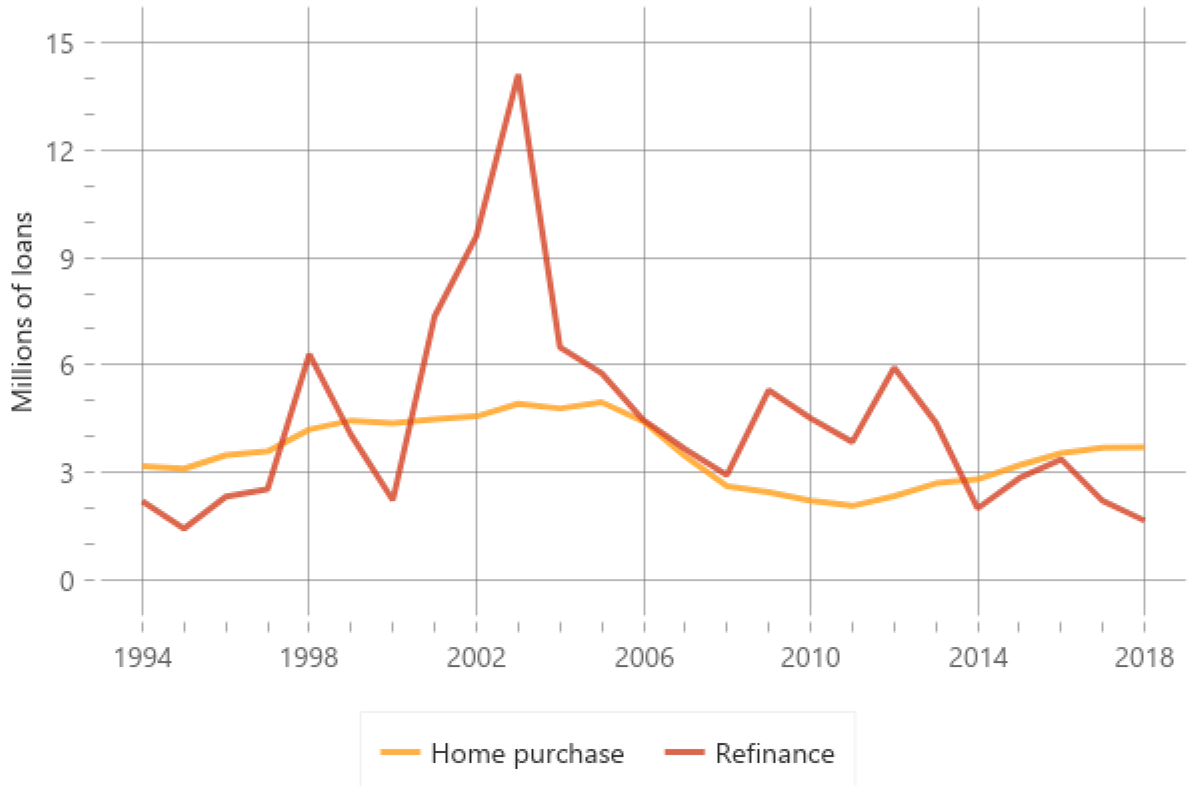
NOTE: Components may not sum to totals because of rounding. Applications include those withdrawn and those closed for incompleteness. FHA is Federal Housing Administration; VA is U.S. Department of Veterans Affairs; FSA is Farm Service Agency; RHS is Rural Housing Service.

(1) A multifamily property consists of five or more units.

(2) Consists of all requests for preapproval. Preapprovals are not related to a specific property and thus are distinct from applications.

SOURCE: Here and in subsequent tables and figures, except as noted, Federal Financial Institutions Examination Council, data reported under the Home Mortgage Disclosure Act (www.ffiec.gov/hmda).

**FIGURE 1:** NUMBER OF HOME-PURCHASE AND REFINANCE MORTGAGE ORIGINATIONS, 1994-2018




the average rate for 2017 was approximately 4.0 percent for the year.[23] Rates for 15-year mortgages followed similar patterns.

Unlike refinance mortgages, one-to-four-family home-purchase originations were unchanged from 2017 to 2018 at 4.3 million. This marked the end of an upward trend going back to 2011. The volume of home improvement loans reported declined from 549,000 in 2017 to 183,000 in 2018, following the 2015 HMDA rule's exclusion of unsecured home improvement loans. As noted above in footnote 20, this is one aspect of the analysis the Bureau was unable to make consistent over time as all results prior to 2017 include unsecured home improvement loans, but the 2018 results do not. Overall, total originations reported under HMDA for 2018 declined by approximately 924,000 (12.6 percent), with the change to reporting of unsecured home

[23] This measure comes from Freddie Mac's Primary Mortgage Market Survey and is available from the Federal Reserve Bank of St. Louis' Federal Reserve Economic Database (FRED) at https://fred.stlouisfed.org/series/MORTGAGE30US.

improvement loans driving about 40 percent of this decline, and the decline in refinance loans driving approximately 60 percent.

In Table 1, applications and originations are disaggregated by lien status (*e.g.*, first lien, junior lien), occupancy (*e.g.*, owner-occupied, non-owner-occupied), property type (*e.g.*, site built, manufactured home), loan purpose (*e.g.*, home purchase, home improvement, refinance), and loan type (*e.g.,* conventional, FHA-insured, VA-guaranteed, FSA/RHS).[24] Most one-to-four-family home-purchase loans were first liens for owner-occupied properties. In 2018, there were 3.7 million such originations, representing 87.0 percent of home purchase loans, which was unchanged from 2017.[25] Although the total was unchanged, there were significant differences in the underlying loan and property types. For example, among first-lien, owner-occupied, one-to-four-family, home-purchase originations, the number that were site-built and nonconventional declined by 9.4 percent between 2017 and 2018. In contrast, in this same subset of home-purchase originations, the number that were site-built conventional, manufactured conventional, and manufactured nonconventional increased 4.9 percent, 20.1 percent, and 22.2 percent, respectively.

Similar to home-purchase loans, most one-to-four-family refinance loans were first liens for owner-occupied properties. Unlike home-purchase loans, the volume of these refinance loans declined significantly during 2018, and declined across most loan characteristics. In 2018, there were 1.7 million first-lien, owner-occupied refinance originations, down nearly 25 percent from 2017. For refinance loans, except for first-lien, owner-occupied, conventional, manufactured home originations, which increased by 9.5 percent in 2018, the volume of refinance originations generally declined by roughly 20 percent between 2017 and 2018 for all property types and loan characteristics.

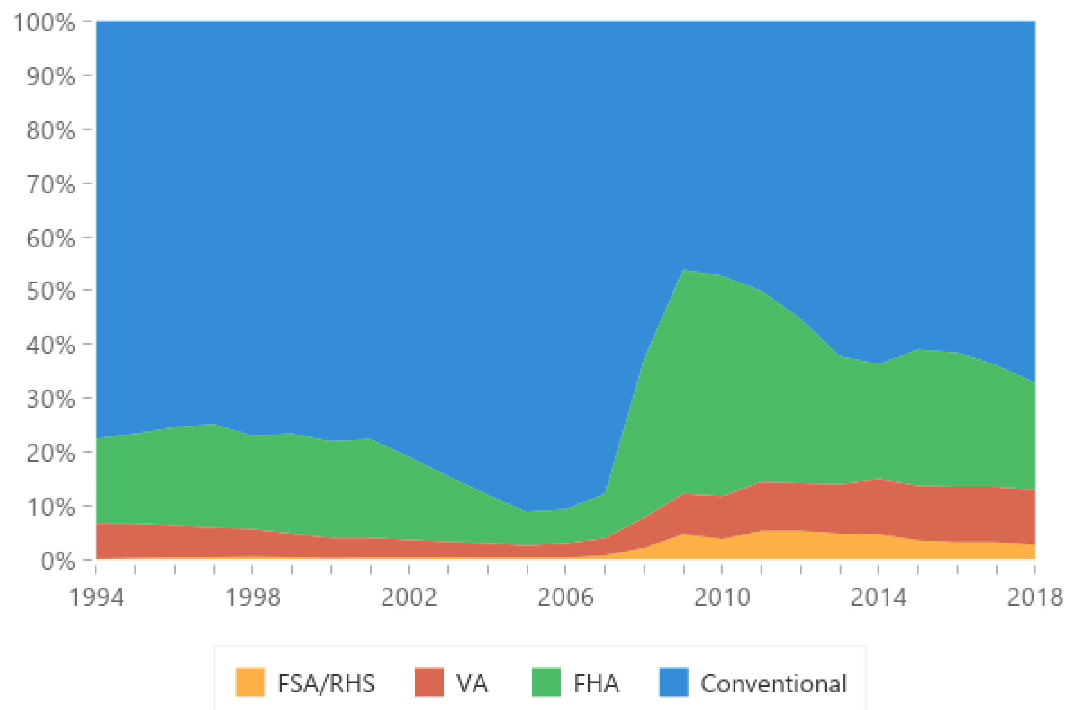
Regarding loan type, nonconventional home purchase and refinance loans are loans with mortgage insurance or other guarantees from federal government agencies, including the FHA, VA, and the U.S. Department of Agriculture's FSA/RHS. Conventional lending encompasses all other loans, including those held in banks' portfolios, those sold to Government-Sponsored Enterprises (GSEs), such as Fannie Mae and Freddie Mac, and those packaged into private-label

[24] Manufactured-home lending differs from lending for site-built homes, in part because many manufactured home loans are financed as chattel-secured lending, which typically carries higher interest rates and shorter terms to maturity than those on loans to purchase site-built homes (for pricing information on manufactured home loans, see Tables 8 and 9). This Data Point article focuses almost entirely on site-built mortgage originations, which constitute the vast majority of originations (as shown in Table 1).
[25] The HMDA data prior to 2004 did not provide lien status for loans, and thus the number of loans prior to 2004 in Figure 1 include both first- and junior-lien loans. That said, including junior-lien home-purchase loans in 2018 does not change the conclusion that home-purchase lending in 2018 was similar to that in the mid-1990s.

securities. Historically, nonconventional loans have had higher loan-to-value (LTV) ratios—that is, the borrowers provide relatively smaller down payments. However, this is changing somewhat as some conventional programs now require down-payments as small as 3 percent.

Among first-lien, home-purchase loans for one-to-four-family, owner-occupied, site-built properties, 33.0 percent were nonconventional, down from 36.3 percent in 2017 and down from a peak of approximately 54 percent in 2009 (Figure 2). Figure 2 shows that the marked decline in the nonconventional share since 2009 reflects a decrease in the FHA share of loans, while the VA and FSA/RHS shares have been steadier. Fluctuations in the FHA share of home-purchase originations appear to be driven in part by changes in the up-front and annual mortgage insurance premiums (MIPs) that the FHA charges borrowers. For example, between October 2010 and April 2013, the annual MIP for a typical home-purchase loan more than doubled, from 0.55 percent of the loan amount to 1.35 percent.[26] FHA's market share tends to be lower in periods when the FHA charges relatively higher premiums.

**FIGURE 2:** NONCONVENTIONAL SHARE OF HOME-PURCHASE MORTGAGE ORIGINATIONS, 1994-2018




[26] Changes over time to the FHA's insurance premium, including up-front and annual MIPs, have been documented in detail in the FHA's annual Actuarial Review of the Mutual Mortgage Insurance Fund. For the most recent review, see FY 2018 Actuarial Review of Forward Portfolio available at https://www.hud.gov/sites/dfiles/Housing/documents/ActuarialMMIFForward2018.pdf. A typical FHA home-purchase loan has an LTV of over 95 percent and a loan term longer than 15 years.

In addition to loan applications and originations, the HMDA data also include preapproval requests for home-purchase loans. As shown in Table 1, lenders reported approximately 467,000 preapproval requests, which is down slightly less than 4 percent from 2017. Just under 22 percent of these requests were denied. Approximately 16 percent were applicants lenders had approved but the applicants did not take further action, which is up from the 7.4 percent of applicants in 2017 who lenders approved but took no further action. This increase reflects the change to reporting requirements for home purchase loans in the 2015 HMDA rule, which required that lenders report preapproval requests that lenders approved but applicants did not act on.

Finally, HMDA data also include information on loans purchased by reporting institutions during the reporting year, although the purchased loans may have been originated before 2018. Table 1 shows that lenders purchased 1.8 million loans from other institutions in 2018, a 15.9 percent decline from 2017.

# 5. Mortgage outcomes by demographic groups

HMDA data are a key resource for policymakers and the public to understand the distribution of mortgage credit across demographic groups. Tables 2 through 8 provide information on loan shares, product usage, denials, and mortgage pricing for groups defined by applicant income, neighborhood income, and applicant race and ethnicity. Tables 2 through 7 focus on first-lien home purchase and refinance loans for one-to-four-family, owner-occupied, site-built properties, which accounted for approximately 81.2 percent of all HMDA originations excluding purchased loans in 2018. Table 8, in contrast, also includes loans for manufactured homes.

## 5.1 Distribution of home loans across demographic groups

One of the 2015 HMDA rule changes to historical HMDA data points altered reporting requirements for race and ethnicity. Beginning in 2018, mortgage applicants now have the option of providing disaggregated information for the Asian, Pacific Islander, and Native American race categories and for the Hispanic ethnicity category.[27] Of the overall total of 12.9 million applications reported in the 2018 HMDA data, including open-end LOCs, over 1.3 million applications included at least one disaggregated racial or ethnic category. The two most commonly reported disaggregated groups were Mexican and Other Hispanic, which were reported for 3.0 percent and 1.5 percent of total applications, respectively.[28] To make the 2018 results consistent with and comparable to results from previous years, this Data Point article aggregates all disaggregated race and ethnicity data to their corresponding aggregate category. As an example, if an applicant reported being Chinese, that applicant is aggregated into the Asian category for purposes of this Data Point. The 2015 HMDA rule also increased the number of ethnicities primary applicants and co-applicants can provide from one each to five each. To convert the new set of five ethnicity fields for the primary applicant back into one ethnicity field, the Bureau uses values from just the first ethnicity data field as in past years, unless the first

[27] See Appendix A for a description of the new 2018 definitions, formats, and values for race and ethnicity.
[28] The Bureau's second HMDA Data Point article provides additional information about and analyses of the disaggregated race and ethnicity data.

ethnicity data field contains a missing value. When the first ethnicity data field contains a missing value, the Bureau replaces that missing value, if possible, using the remaining four data fields. A similar process is used for co-applicants.[29]

Table 2 shows different groups' shares of home purchase and refinance loans and how these shares have changed over time. The footnotes to Table 2 summarize how applicants were classified into racial and ethnic categories. Black borrowers increased their share of home-purchase loans for one-to-four-family, owner-occupied, site-built properties in 2018, the fifth consecutive increase in this share. The HMDA data indicate that 6.7 percent of such loans went to Black borrowers, up from 6.4 percent in 2017.[30] For non-Hispanic White borrowers, their share of home-purchase loans was 62.0 percent in 2018, down from 64.9 percent in 2017. This drop continues a downward trend that began in 2013 when non-Hispanic White borrowers' share of home purchase loans was 70.2 percent. A similar downward trend for non-Hispanic White borrowers' share is also seen for refinance loans, which has declined steadily from 74.6 percent in 2009 to just over 63 percent in both 2017 and 2018. These downward trends are notable given the increase in homeownership rates for non-Hispanic Whites from 71.6 percent in early 2015 to 73.6 percent by the end of 2018.[31] One additional interesting result from Table 2 is the fairly large increases in shares for loans where race is not recorded. These shares increased from 9.6 percent to 12.0 percent for home-purchase loans and from 15.8 to 16.2 percent for refinance loans.

[29] The application is designated as "joint" if one applicant was reported as White and the other was reported as one or more minority races or if the application is designated as White with one Hispanic applicant and one non-Hispanic applicant.

[30] The bottom of Table 2 provides the total loan counts for each year, and thus the number of loans to a given group in a given year can be easily derived. For example, the number of home-purchase loans to Asians in 2018 was approximately 212,000, derived by multiplying 3.6 million loans by 5.9 percent.

[31] See Federal Reserve Bank Economic Data (FRED) from the Federal Reserve Bank of St. Louis (https://fred.stlouisfed.org/series/NHWAHORUSQ156N).

**TABLE 2:** DISTRIBUTION OF HOME-PURCHASE AND REFINANCE LOANS, BY BORROWER AND NEIGHBORHOOD CHARACTERISTICS, 2004-2018 (PERCENT EXCEPT AS NOTED)

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. Home Purchase** | | | | | | | | | | | | | | | |
| *Borrower race and ethnicity*[1] | | | | | | | | | | | | | | | |
| Asian | 4.8 | 5.0 | 4.5 | 4.5 | 4.9 | 5.3 | 5.5 | 5.2 | 5.3 | 5.7 | 5.4 | 5.3 | 5.5 | 5.8 | 5.9 |
| Black or African American | 7.1 | 7.7 | 8.7 | 7.6 | 6.3 | 5.7 | 6.0 | 5.5 | 5.1 | 4.8 | 5.2 | 5.5 | 6.0 | 6.4 | 6.7 |
| Hispanic white | 7.6 | 10.5 | 11.7 | 9.0 | 7.9 | 8.0 | 8.1 | 8.3 | 7.7 | 7.3 | 7.9 | 8.3 | 8.8 | 8.8 | 8.9 |
| Non-Hispanic white | 57.1 | 61.7 | 61.2 | 65.4 | 67.5 | 67.9 | 67.6 | 68.7 | 70.0 | 70.2 | 69.1 | 68.1 | 66.4 | 64.9 | 62.0 |
| Other minority[2] | 1.4 | 1.3 | 1.1 | 1.0 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 |
| Joint | 2.3 | 2.3 | 2.3 | 2.5 | 2.8 | 2.8 | 2.7 | 2.8 | 2.9 | 3.1 | 3.4 | 3.5 | 3.6 | 3.7 | 3.6 |
| Missing | 19.8 | 11.5 | 10.5 | 10.1 | 9.6 | 9.3 | 9.1 | 8.6 | 8.2 | 8.2 | 8.3 | 8.5 | 8.9 | 9.6 | 12.0 |
| All | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| *Borrower income*[3] | | | | | | | | | | | | | | | |
| Low or moderate | 27.7 | 24.6 | 23.6 | 24.6 | 28.0 | 36.6 | 35.4 | 34.4 | 33.3 | 28.5 | 27.0 | 27.9 | 26.2 | 26.3 | 28.1 |
| Middle | 26.9 | 25.7 | 24.7 | 25.1 | 27.0 | 26.6 | 25.6 | 25.2 | 25.1 | 25.2 | 25.6 | 26.1 | 26.4 | 26.7 | 26.7 |
| High | 41.4 | 45.5 | 46.7 | 46.9 | 42.9 | 34.6 | 37.3 | 38.8 | 40.0 | 44.7 | 46.1 | 44.9 | 46.4 | 46.0 | 44.3 |
| Income not used or not applicable | 4.0 | 4.2 | 5.0 | 3.4 | 2.1 | 2.2 | 1.7 | 1.6 | 1.5 | 1.6 | 1.3 | 1.1 | 1.0 | 1.0 | 0.9 |
| All | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| *Neighborhood income*[4] | | | | | | | | | | | | | | | |
| Low or moderate | 14.5 | 15.1 | 15.7 | 14.4 | 13.2 | 12.6 | 12.1 | 11.0 | 12.8 | 12.7 | 13.3 | 13.5 | 14.1 | 16.1 | 17.0 |
| Middle | 48.7 | 49.2 | 49.5 | 49.6 | 49.8 | 50.2 | 49.5 | 49.4 | 43.6 | 43.7 | 44.6 | 45.2 | 45.8 | 44.2 | 44.2 |
| High | 35.8 | 34.7 | 33.7 | 35.1 | 35.9 | 35.8 | 37.7 | 39.1 | 43.2 | 43.2 | 41.8 | 41.0 | 40.0 | 39.6 | 38.8 |
| All | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B. Refinance** | | | | | | | | | | | | | | | |
| *Borrower race and ethnicity*[1] | | | | | | | | | | | | | | | |
| Asian | 3.5 | 2.9 | 3.0 | 3.1 | 3.1 | 4.1 | 5.2 | 5.4 | 5.5 | 4.7 | 4.3 | 5.0 | 5.5 | 4.0 | 3.7 |
| Black or African American | 7.4 | 8.3 | 9.6 | 8.4 | 6.0 | 3.5 | 2.9 | 3.1 | 3.3 | 4.4 | 5.4 | 5.0 | 5.0 | 5.9 | 6.2 |
| Hispanic white | 6.2 | 8.6 | 10.1 | 8.7 | 5.3 | 3.2 | 3.0 | 3.3 | 3.9 | 5.0 | 6.2 | 6.3 | 6.2 | 6.8 | 6.8 |
| Non-Hispanic white | 57.2 | 60.9 | 59.6 | 62.7 | 70.7 | 74.6 | 74.3 | 73.5 | 72.5 | 70.5 | 67.8 | 67.2 | 65.2 | 63.2 | 63.3 |
| Other minority[2] | 1.4 | 1.4 | 1.3 | 1.1 | 0.8 | 0.6 | 0.5 | 0.6 | 0.6 | 0.7 | 0.9 | 0.8 | 0.9 | 1.0 | 0.9 |
| Joint | 2.1 | 2.1 | 1.9 | 2.0 | 2.2 | 2.6 | 2.7 | 2.8 | 3.1 | 3.1 | 3.2 | 3.3 | 3.4 | 3.3 | 2.9 |
| Missing | 22.1 | 15.7 | 14.6 | 14.1 | 11.9 | 11.4 | 11.4 | 11.3 | 11.1 | 11.6 | 12.2 | 12.4 | 13.8 | 15.8 | 16.2 |
| All | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| *Borrower income*[3] | | | | | | | | | | | | | | | |
| Low or moderate | 26.2 | 25.5 | 24.7 | 23.3 | 23.4 | 19.6 | 18.9 | 19.2 | 19.6 | 21.1 | 22.1 | 19.0 | 16.9 | 22.9 | 30.0 |
| Middle | 26.3 | 26.8 | 26.1 | 25.5 | 25.4 | 22.4 | 22.5 | 21.3 | 21.8 | 21.7 | 21.9 | 21.0 | 20.3 | 23.4 | 24.9 |
| High | 38.8 | 40.8 | 43.7 | 46.0 | 44.6 | 45.6 | 49.5 | 48.1 | 47.6 | 46.3 | 44.9 | 45.2 | 47.5 | 44.0 | 41.0 |
| Income not used or not applicable | 8.7 | 6.9 | 5.5 | 5.2 | 6.6 | 12.4 | 9.1 | 11.4 | 10.9 | 11.0 | 11.1 | 14.8 | 15.3 | 9.7 | 4.1 |
| All | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| *Neighborhood income*[4] | | | | | | | | | | | | | | | |
| Low or moderate | 15.3 | 16.5 | 17.9 | 16.1 | 11.9 | 7.8 | 7.2 | 7.4 | 10.1 | 12.1 | 13.3 | 12.3 | 12.0 | 15.5 | 16.8 |
| Middle | 50.0 | 51.3 | 52.0 | 52.2 | 51.9 | 47.5 | 46.1 | 46.1 | 41.9 | 43.7 | 45.3 | 43.8 | 43.4 | 44.6 | 45.6 |
| High | 33.9 | 31.6 | 29.4 | 31.0 | 35.2 | 43.5 | 46.0 | 46.0 | 47.6 | 43.9 | 41.3 | 43.7 | 44.4 | 39.7 | 37.6 |
| All | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Memo | | | | | | | | | | | | | | | |
| Number of home-purchase loans (thousands) | 4,660 | 4,836 | 4,298 | 3,331 | 2,533 | 2,391 | 2,157 | 2,018 | 2,284 | 2,638 | 2,747 | 3,134 | 3,463 | 3,606 | 3,596 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of refinance loans (thousands) | 6,412 | 5,692 | 4,397 | 3,588 | 2,869 | 5,243 | 4,483 | 3,823 | 5,888 | 4,349 | 1,971 | 2,816 | 3,341 | 2,176 | 1,631 |

NOTE: First-lien mortgages for one-to-four-family, owner-occupied, site-built homes. Rows may not sum to 100 because of rounding or, for the distribution by neighborhood income, because property location is missing.

(1) Applications are placed in one category for race and ethnicity. The application is designated as "joint" if one applicant was reported as White and the other was reported as one or more minority races or if the application is designated as White with one Hispanic applicant and one non-Hispanic applicant. If there are two applicants and each reports a different minority race, the application is designated as two or more minority races. If an applicant reports multiple races and one is White, that applicant is categorized under the minority race. Otherwise, the applicant is categorized under the first race reported. "Missing" refers to applications in which the race of the applicant(s) has not been reported or is not applicable or the application is categorized as White but ethnicity has not been reported.

(2) Consists of applications by American Indians or Alaska Natives, Native Hawaiians or other Pacific Islanders, and borrowers reporting two or more minority races.

(3) The categories for the borrower-income group are as follows: Low- or moderate-income (or LMI) borrowers have income that is less than 80 percent of estimated current area median family income (AMFI), middle-income borrowers have income that is at least 80 percent and less than 120 percent of AMFI, and high-income borrowers have income that is at least 120 percent of AMFI.

(4) The categories for the neighborhood-income group are based on the ratio of census-tract median family income to area median family income from the 2006-10 American Community Survey data for 2012-2018 and from the 2000 census for 2004-11, and the three categories have the same cutoffs as the borrower-income groups (see note 3).

For income, the shares of both home purchase and refinance loans increased for LMI borrowers and for LMI neighborhoods in 2018. [32,33] The LMI borrower share of home-purchase loans increased modestly from 26.3 percent to 28.1 percent, whereas the LMI borrower share of refinance loans grew more rapidly, from 22.9 percent to 30.0 percent. Conversely, the shares for high-income borrowers both declined. Similarly, LMI neighborhood share increased for both home purchase and refinance loans and declined for high-income neighborhoods, although all of these changes for LMI neighborhoods were smaller than those for LMI borrowers.

In 2012 and 2017, the Federal Financial Institutions Examination Council (FFIEC) revised the census-tract median family income estimates that accompany the public HMDA data (and that are used for this Data Point article). Therefore, in Table 2 and all subsequent tables that use neighborhood income categories, the underlying neighborhood income data used to generate the results in 2017 and 2018 are different than the data used for 2016 and earlier. Similarly, income data used for the results from 2012 through 2016 are different than those used from 2011 and earlier. The tract demographic measures for 2017 and 2018 are based on 2011–2015 American Community Survey (ACS) five-year estimates, whereas the 2012–2016 data relied on 2006-2010 ACS five-year estimates, and 2004–2011 data relied on 2000 Census data. In addition, the Office of Management and Budget (OMB) updates metropolitan area delineations over time. [34] In general, income and demographic data can be compared across non-overlapping ACS datasets, and also between ACS and Census 2000 data. [35] However, given changes in geographic delineations over time, some caution should be exercised in comparing relative income measurements over time.

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[32] In accordance with definitions used by the federal bank supervisory agencies to enforce the Community Reinvestment Act, LMI borrowers are defined as those with incomes of less than 80 percent of estimated current area median family income (AMFI). Middle-income borrowers have incomes of at least 80 percent and less than 120 percent of AMFI, and high-income borrowers have incomes of at least 120 percent of AMFI. AMFI is estimated based on the incomes of residents of the metropolitan area or nonmetropolitan portion of the state in which the loan-securing property is located. Definitions for LMI, middle-income, and high-income neighborhoods are identical to those for LMI, middle-income, and high-income borrowers but are based on the ratio of census-tract median family income to AMFI measured from the census data. For AMFI estimates, see Federal Financial Institutions Examination Council (2018), "FFIEC Median Family Income Report," available at https://www.ffiec.gov/Medianincome.htm. Note that AMFI estimates tend to reflect lagged income levels. During times when incomes are changing rapidly, such as during the Great Recession, AMFI estimates can be significantly understated or overstated.

[33] The 2018 HMDA data reflect property locations using the census-tract geographic boundaries created for the 2010 decennial census as well as recent updates to the list of MSAs published by the OMB. The first year for which the HMDA data used this most recent list of MSAs is 2014. For further information, see Federal Financial Institutions Examination Council (2013), "OMB Announcement – Revised Delineations of MSAs," press release, February 28, 2013 available at https://www.ffiec.gov/hmda/OMB_MSA.htm.

[34] For details on the changes of census information used in this Data Point article, see FFIEC Census Information Sheets at https://www.ffiec.gov/census/censusInfo.aspx.

[35] See https://www.census.gov/programs-surveys/acs/guidance/comparing-acs-data.html for more details.

## 5.2 Average loan size by demographic group

Table 3 shows the average size of home purchase and refinance loans for different groups over time. All dollar amounts are reported in nominal terms. The average loan amounts continue to differ significantly across racial and ethnic groups. Asian borrowers took out the largest loans, averaging approximately $406,000 for home purchases and $376,000 for refinancings in 2018, whereas loans to Black borrowers continued to be for the smallest amounts, averaging approximately $232,000 for home purchases and $209,000 for refinancings.[36]

The average home-purchase loan amount increased across all racial, ethnic, and income levels between 2017 and 2018. The increases were uniform across racial and ethnic groups, generally increasing between 1.2 and 4.1 percent. The largest increase in average home-purchase loan amount occurred for LMI borrowers, increasing 7.1 percent from $152,000 in 2017 to $163,000 in 2018. Loan amounts increased by 5.1 percent for middle-income borrowers and 3.3 percent for high-income borrowers.

From a longer-term perspective, average home-purchase loan amounts have followed historical trends in home prices, rising during the mid-2000s, falling sharply through 2008 and 2009, and then beginning to rise again since about 2010.[37] Trends in loan amounts differ substantially by race and ethnicity, which were likely driven by local differences in home prices where the respective groups of borrowers live, incomes of the respective groups, and other factors that may affect the sizes of the homes these groups were purchasing. The average value of home-purchase loans to Hispanic White borrowers increased from $230,000 in 2017 to $237,000 in 2018, which is just below the pre-Recession peak of $238,000 in 2006, albeit in nominal dollars. Hispanic White is the only racial/ethnic group for which this measure has yet to fully return to pre- crisis levels; average home-purchase loan amounts returned to pre-crisis levels (in nominal terms) by 2014 for Asians and Blacks, and by 2013 for non-Hispanic Whites.[38]

[36] Median loan amounts (not shown in tables) followed similar trends as average loan amounts.
[37] Housing prices continued their general upward trend during 2018. The Federal Housing Finance Agency's (FHFA's) quarterly Purchase-Only House Price Index (seasonally adjusted) increased each quarter during 2018 and was up 5.9 percent for the year. Following a significant drop during and after the Great Recession, the price increases for 2018 continue a consistent upward trend for the last eight years. The housing price increases seen at the national level during 2018 varied considerably across geography ranging from a slight 0.8 percent increase in North Dakota to 11.6 and 11.2 percent increases in Idaho and Nevada, respectively (seasonally adjusted, year-over-year comparison). All of these data are available from the FHFA at https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx.

[38] Beginning in 2018, HMDA reporters were required to report loan amount to the dollar instead of rounded to the thousands, which might affect comparability of averages over time.

**TABLE 3:** AVERAGE VALUE OF HOME-PURCHASE AND REFINANCE LOANS, BY BORROWER AND NEIGHBORHOOD CHARACTERISTICS, 2004-2018 (THOUSANDS OF DOLLARS, NOMINAL, EXCEPT AS NOTED)

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. Home Purchase** | | | | | | | | | | | | | | | |
| *Borrower race and ethnicity*[1] | | | | | | | | | | | | | | | |
| Asian | 280 | 316 | 326 | 334 | 299 | 276 | 293 | 291 | 304 | 328 | 344 | 360 | 373 | 390 | 406 |
| Black or African American | 166 | 183 | 197 | 197 | 184 | 172 | 174 | 174 | 179 | 193 | 199 | 209 | 217 | 224 | 232 |
| Hispanic white | 189 | 224 | 238 | 220 | 186 | 168 | 168 | 168 | 176 | 190 | 198 | 209 | 220 | 230 | 237 |
| Non-Hispanic white | 193 | 211 | 216 | 222 | 209 | 195 | 204 | 204 | 213 | 226 | 231 | 239 | 246 | 254 | 261 |
| Other minority[2] | 206 | 240 | 257 | 245 | 216 | 196 | 201 | 198 | 206 | 219 | 229 | 241 | 249 | 256 | 259 |
| Joint | 233 | 255 | 261 | 269 | 255 | 248 | 263 | 261 | 274 | 289 | 293 | 302 | 311 | 321 | 332 |
| Missing | 216 | 248 | 261 | 280 | 265 | 242 | 256 | 262 | 279 | 298 | 293 | 303 | 308 | 317 | 313 |
| *Borrower income*[3] | | | | | | | | | | | | | | | |
| Low or moderate | 114 | 116 | 117 | 124 | 128 | 129 | 128 | 125 | 131 | 132 | 132 | 141 | 146 | 152 | 163 |
| Middle | 165 | 170 | 170 | 176 | 182 | 187 | 189 | 184 | 192 | 194 | 193 | 204 | 209 | 217 | 228 |
| High | 281 | 306 | 313 | 317 | 298 | 291 | 303 | 302 | 313 | 323 | 328 | 341 | 345 | 359 | 371 |
| Income not used or not applicable | 208 | 235 | 254 | 257 | 211 | 189 | 204 | 221 | 231 | 258 | 275 | 292 | 312 | 333 | 366 |
| *Neighborhood income*[4] | | | | | | | | | | | | | | | |
| Low or moderate | 159 | 180 | 189 | 188 | 175 | 160 | 164 | 163 | 158 | 171 | 178 | 188 | 199 | 204 | 213 |
| Middle | 172 | 190 | 197 | 196 | 186 | 174 | 177 | 173 | 178 | 191 | 196 | 206 | 216 | 224 | 233 |
| High | 258 | 284 | 294 | 301 | 277 | 257 | 270 | 271 | 282 | 300 | 306 | 316 | 324 | 340 | 349 |
| Memo | | | | | | | | | | | | | | | |
| All home-purchase loans | 201 | 221 | 228 | 232 | 217 | 202 | 210 | 210 | 221 | 235 | 240 | 249 | 257 | 267 | 274 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventional jumbo loans (percent of originations)(5) | 11.2 | 12.7 | 9.4 | 6.8 | 2.3 | 1.3 | 1.7 | 2.2 | 3.0 | 4.0 | 4.8 | 5.3 | 5.2 | 5.5 | 5.2 |
| Conventional jumbo loans (percent of loaned dollars)(5) | 29.4 | 32.5 | 26.8 | 21.8 | 10.1 | 6.2 | 7.5 | 9.5 | 12.0 | 14.6 | 16.5 | 17.3 | 16.9 | 17.6 | 16.9 |
| **B. Refinance** | | | | | | | | | | | | | | | |
| *Borrower race and ethnicity(1)* | | | | | | | | | | | | | | | |
| Asian | 274 | 325 | 370 | 368 | 321 | 298 | 313 | 309 | 308 | 304 | 341 | 363 | 368 | 368 | 376 |
| Black or African American | 151 | 180 | 199 | 192 | 173 | 184 | 180 | 174 | 181 | 171 | 174 | 199 | 212 | 213 | 209 |
| Hispanic white | 178 | 219 | 252 | 244 | 193 | 190 | 191 | 183 | 190 | 180 | 190 | 214 | 228 | 223 | 227 |
| Non-Hispanic white | 180 | 205 | 221 | 222 | 205 | 209 | 210 | 208 | 212 | 206 | 216 | 239 | 251 | 238 | 237 |
| Other minority(2) | 190 | 229 | 269 | 258 | 211 | 217 | 218 | 207 | 213 | 201 | 213 | 240 | 252 | 245 | 240 |
| Joint | 210 | 246 | 265 | 262 | 243 | 247 | 254 | 249 | 254 | 249 | 266 | 292 | 304 | 290 | 295 |
| Missing | 194 | 226 | 246 | 250 | 242 | 243 | 248 | 253 | 253 | 244 | 245 | 268 | 277 | 259 | 262 |
| *Borrower income(3)* | | | | | | | | | | | | | | | |
| Low or moderate | 114 | 124 | 124 | 126 | 129 | 138 | 133 | 128 | 135 | 128 | 123 | 136 | 143 | 143 | 154 |
| Middle | 162 | 181 | 183 | 181 | 180 | 185 | 180 | 174 | 182 | 171 | 174 | 193 | 202 | 200 | 208 |
| High | 256 | 294 | 320 | 312 | 276 | 268 | 274 | 281 | 277 | 276 | 301 | 324 | 330 | 329 | 335 |
| Income not used or not applicable | 150 | 178 | 240 | 236 | 192 | 203 | 202 | 185 | 211 | 193 | 198 | 229 | 243 | 225 | 236 |
| *Neighborhood income(4)* | | | | | | | | | | | | | | | |
| Low or moderate | 142 | 169 | 188 | 185 | 164 | 173 | 173 | 167 | 163 | 153 | 157 | 182 | 196 | 185 | 187 |
| Middle | 158 | 184 | 201 | 198 | 182 | 184 | 182 | 175 | 181 | 173 | 180 | 201 | 214 | 204 | 205 |
| High | 245 | 282 | 313 | 311 | 272 | 259 | 265 | 269 | 269 | 270 | 290 | 311 | 321 | 316 | 320 |
| Memo | | | | | | | | | | | | | | | |
| All refinance loans | 185 | 212 | 232 | 231 | 212 | 216 | 220 | 218 | 221 | 213 | 222 | 247 | 259 | 246 | 245 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conventional jumbo loans (percent of originations)(5) | 9.2 | 11.4 | 10.2 | 7.5 | 2.0 | 0.9 | 1.6 | 2.4 | 2.2 | 3.0 | 4.2 | 4.9 | 4.6 | 4.3 | 4.0 |
| Conventional jumbo loans (percent of loaned dollars)(5) | 25.8 | 29.6 | 28.3 | 23.0 | 9.0 | 4.1 | 6.9 | 10.7 | 9.2 | 12.7 | 16.5 | 16.8 | 15.7 | 16.4 | 15.3 |

NOTE: First-lien mortgages for one-to-four-family, owner-occupied, site-built homes.

(1) See table 2, note 1.

(2) See table 2, note 2.

(3) See table 2, note 3.

(4) See table 2, note 4.

(5) Fraction of loans that are conventional and have loan amounts in excess of the single-family conforming loan-size limits for eligibility for purchase by the government-sponsored enterprises.

## 5.3 Jumbo lending

As shown in Table 3, conventional jumbo loans—those with loan amounts greater than the GSEs' conforming loan limits and with no other government guarantee—made up 5.2 percent of all first-lien home-purchase loans for owner-occupied, one-to-four-family, site-built homes in 2018, down from 5.5 percent in 2017.[39] Among refinance loans shown in Table 3, the share of conventional jumbo loans decreased to 4.0 percent in 2018 from 4.3 percent in 2017. Because of their larger size, conventional jumbo loans made up a correspondingly larger share of the dollar volume of mortgages, accounting for 16.9 percent of home-purchase loans and 15.3 percent of refinance loans in 2018.

## 5.4 Variation across demographic groups in nonconventional loan use

Table 4 shows that Black and Hispanic White borrowers were much more likely than other racial and ethnic groups to use nonconventional home-purchase loans (FHA, VA, RHS, and FSA loans). In 2018, among those obtaining a first-lien, owner-occupied, one-to-four-family home purchase mortgage, 60.6 percent of Blacks and 48.8 percent of Hispanic Whites took out a nonconventional home-purchase loan, whereas 29.7 percent of non-Hispanic Whites and just

[39] A loan qualifies as jumbo in Table 3 if the loan amount is above the GSEs' conforming loan-size limit for a single-family home for that year and location. The conforming loan-size limit was mostly uniform across the nation prior to 2008 The limits in Alaska, Hawaii, the U.S. Virgin Islands, and Guam were 50 percent higher than in the nation at large. For the years 2008 and thereafter, designated higher-cost areas had elevated limits. For 2018, the general conforming loan-size limit was $453,100, and the maximum high-cost loan-size limit was $679,650. Conforming loan-size limits increase with the number of units that make up the property, but prior to 2018 the HMDA data did not differentiate between properties from one to four units. Therefore, prior to 2018, some loans in the tables may have been misclassified as jumbo despite being eligible for purchase by a GSE. This is not an issue for 2018 data, since institutions reported the exact number of property units. A second issue prior to 2018 is that HMDA's implementing rules required lenders to report the loan amount rounded in nearest thousands. The conforming loan limits published by the FHFA may be set in hundreds of dollars. For this analysis, prior to 2018 the Bureau rounded FHFA conforming loan limits to the nearest thousand to match with the HMDA reporting requirement. This is not an issue for 2018, since loan amount was reported to the dollar.

**TABLE 4:** NONCONVENTIONAL SHARE OF HOME-PURCHASE AND REFINANCE LOANS, BY BORROWER AND NEIGHBORHOOD CHARACTERISTICS, 2004-2018 (PERCENT)

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. Home Purchase** | | | | | | | | | | | | | | | |
| *Borrower race and ethnicity*[1] | | | | | | | | | | | | | | | |
| Asian | 2.9 | 1.8 | 2.1 | 2.6 | 13.4 | 26.1 | 26.6 | 25.8 | 21.9 | 16.1 | 14.7 | 16.6 | 15.6 | 13.4 | 11.8 |
| Black or African American | 21.7 | 14.3 | 13.6 | 21.7 | 64.1 | 82.0 | 82.9 | 80.3 | 77.2 | 70.8 | 68.0 | 70.2 | 68.5 | 64.9 | 60.6 |
| Hispanic white | 13.7 | 7.5 | 7.0 | 12.4 | 51.4 | 75.4 | 77.0 | 74.1 | 70.7 | 63.1 | 59.6 | 62.7 | 59.8 | 55.5 | 48.8 |
| Non-Hispanic white | 11.1 | 8.9 | 9.5 | 11.5 | 35.4 | 52.0 | 50.3 | 47.4 | 42.2 | 35.5 | 33.4 | 36.0 | 35.2 | 33.1 | 29.7 |
| Other minority[2] | 14.0 | 9.3 | 9.4 | 14.8 | 48.4 | 67.6 | 68.8 | 65.9 | 62.2 | 55.5 | 54.0 | 55.3 | 54.2 | 52.1 | 49.3 |
| Joint | 16.9 | 12.8 | 14.4 | 17.2 | 46.4 | 59.4 | 56.3 | 53.6 | 48.9 | 42.1 | 41.3 | 43.8 | 43.1 | 40.9 | 37.3 |
| Missing | 11.3 | 5.1 | 5.7 | 8.8 | 32.7 | 50.6 | 49.4 | 45.9 | 39.4 | 31.9 | 32.2 | 34.9 | 34.7 | 31.9 | 31.0 |
| *Borrower income*[3] | | | | | | | | | | | | | | | |
| Low or moderate | 20.3 | 15.2 | 14.9 | 16.0 | 46.1 | 65.3 | 66.6 | 64.5 | 59.7 | 52.5 | 50.3 | 53.4 | 51.7 | 47.5 | 41.6 |
| Middle | 14.3 | 11.0 | 12.6 | 16.7 | 46.1 | 60.4 | 59.3 | 57.0 | 51.5 | 45.6 | 44.8 | 47.7 | 47.6 | 45.1 | 40.8 |
| High | 5.3 | 3.9 | 4.9 | 7.5 | 26.7 | 38.5 | 37.2 | 34.4 | 29.5 | 25.1 | 24.2 | 26.3 | 26.7 | 25.2 | 23.2 |
| *Neighborhood income*[4] | | | | | | | | | | | | | | | |
| Low or moderate | 15.8 | 9.7 | 9.6 | 13.8 | 45.4 | 64.3 | 65.0 | 61.2 | 57.9 | 49.9 | 48.1 | 50.4 | 48.8 | 46.2 | 41.4 |
| Middle | 14.1 | 10.2 | 10.8 | 14.2 | 42.7 | 59.8 | 59.4 | 56.9 | 52.1 | 44.7 | 43.1 | 45.6 | 44.6 | 41.7 | 37.8 |
| High | 7.1 | 5.4 | 6.1 | 7.6 | 27.4 | 43.4 | 42.0 | 39.5 | 34.6 | 28.2 | 26.1 | 29.0 | 28.4 | 26.3 | 23.8 |
| | | | | | | | | | | | | | | | |
| Memo: All borrowers | 11.9 | 8.5 | 9.0 | 11.8 | 37.6 | 54.4 | 53.4 | 50.5 | 45.2 | 38.2 | 36.6 | 39.4 | 38.7 | 36.3 | 33.0 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B. Refinance** | | | | | | | | | | | | | | | |
| *Borrower race and ethnicity(1)* | | | | | | | | | | | | | | | |
| Asian | 1.2 | 0.7 | 0.6 | 1.0 | 4.6 | 5.7 | 4.7 | 4.3 | 5.9 | 6.7 | 6.8 | 9.8 | 8.3 | 10.2 | 11.0 |
| Black or African American | 11.1 | 5.8 | 4.4 | 10.2 | 39.2 | 53.8 | 42.0 | 37.8 | 38.6 | 37.1 | 39.1 | 49.4 | 53.0 | 47.0 | 43.1 |
| Hispanic white | 5.6 | 2.6 | 1.9 | 3.9 | 20.5 | 36.2 | 28.2 | 22.9 | 26.9 | 25.8 | 21.2 | 32.1 | 30.5 | 26.4 | 23.3 |
| Non-Hispanic white | 4.0 | 2.4 | 2.6 | 4.9 | 15.9 | 16.8 | 13.6 | 12.2 | 14.2 | 14.8 | 16.3 | 21.0 | 21.7 | 22.3 | 21.5 |
| Other minority(2) | 5.5 | 3.4 | 2.4 | 4.9 | 20.0 | 28.3 | 23.3 | 21.9 | 25.5 | 24.9 | 25.0 | 32.6 | 36.7 | 33.7 | 33.1 |
| Joint | 7.5 | 3.7 | 3.4 | 6.2 | 19.5 | 21.1 | 16.6 | 16.3 | 20.1 | 20.5 | 25.5 | 28.0 | 29.3 | 29.6 | 28.5 |
| Missing | 4.2 | 1.9 | 1.7 | 4.1 | 18.7 | 19.0 | 12.5 | 13.6 | 16.5 | 16.7 | 21.5 | 25.5 | 27.7 | 28.3 | 25.7 |
| *Borrower income(3)* | | | | | | | | | | | | | | | |
| Low or moderate | 2.3 | 1.6 | 2.9 | 5.7 | 18.3 | 16.6 | 14.1 | 11.5 | 9.3 | 9.3 | 13.0 | 16.5 | 18.4 | 23.5 | 28.2 |
| Middle | 1.7 | 1.3 | 2.7 | 6.2 | 19.6 | 13.2 | 12.3 | 10.9 | 8.9 | 9.5 | 13.2 | 14.8 | 15.3 | 21.4 | 23.5 |
| High | 0.8 | 0.6 | 1.1 | 2.7 | 10.6 | 7.2 | 6.8 | 6.3 | 5.5 | 6.1 | 8.8 | 9.2 | 9.2 | 14.2 | 16.4 |
| *Neighborhood income(4)* | | | | | | | | | | | | | | | |
| Low or moderate | 5.9 | 3.2 | 2.9 | 6.3 | 24.6 | 31.2 | 23.1 | 19.7 | 22.2 | 22.1 | 22.4 | 29.5 | 30.4 | 30.4 | 28.1 |
| Middle | 5.2 | 3.0 | 2.9 | 5.8 | 20.2 | 22.3 | 17.5 | 16.1 | 18.4 | 19.0 | 20.9 | 26.8 | 28.2 | 27.8 | 26.1 |
| High | 2.9 | 1.7 | 1.6 | 3.0 | 11.3 | 12.1 | 10.0 | 9.3 | 11.7 | 12.4 | 14.5 | 18.5 | 19.0 | 19.4 | 18.4 |
| | | | | | | | | | | | | | | | |
| Memo: All borrowers | 4.6 | 2.6 | 2.5 | 5.0 | 17.6 | 18.7 | 14.4 | 13.3 | 15.6 | 16.4 | 18.4 | 23.5 | 24.3 | 24.9 | 23.5 |

NOTE: First-lien mortgages for one-to-four-family, owner-occupied, site-built homes. Excludes applications where no credit decision was made. Nonconventional loans are those insured by the FHA or backed by guarantees from the VA, the FSA, or the RHS.

(1) See table 2, note 1.

(2) See table 2, note 2.

(3) See table 2, note 3.

(4) See table 2, note 4.

11.8 percent of Asians did so. Use of nonconventional home-purchase loans declined for each racial/ethnic group from 2017 to 2018, especially for Asians and Hispanic Whites, whose percentages declined by 12.5 percent and 12.1 percent, respectively. These declines in the use of nonconventional home-purchase loans continue the trend of decline from peaks in 2009 and 2010, when more than 80 percent of Black borrowers, more than 75 percent of Hispanic White borrowers, and more than 50 percent of non-Hispanic White borrowers took out nonconventional loans.

Use of nonconventional home-purchase loans was also more prevalent in 2018 among borrowers with lower incomes and in lower-income neighborhoods. About 41.5 percent of both LMI home-purchase borrowers and of applicants borrowing to purchase homes in LMI neighborhoods used nonconventional loans, compared with 23.2 percent of high-income borrowers and 23.8 percent of borrowers in high-income neighborhoods. Again, all of these percentages fell between 2017 and 2018 with the nonconventional share for LMI borrowers showing the largest drop of 12.4 percent.

As was the case for home-purchase loans, Black borrowers and lower-income borrowers were each more likely than other groups to refinance through a nonconventional loan. However, the differences were not as stark as for home-purchase loans. In addition, nonconventional loans were less prevalent in refinance lending overall, and use of nonconventional refinance loans does not show the same consistent downward trend for all racial and income groups in recent years that was observed for nonconventional home-purchase loans.[40] For example, the nonconventional refinance share for Asians increased from 10.2 percent in 2017 to 11.0 percent in 2018. Similarly, between 2017 and 2018, nonconventional refinance shares for LMI, middle-income, and high-income borrowers increased by 4.6 percentage points, 2.2 percentage points, and 2.2 percentage points, respectively. Table 4 does not include borrowers where income was not reported, which explains how the nonconventional share increased for all three of these income groups even though the overall nonconventional share declined.

Historically, one advantage of nonconventional loans was the relatively low down-payment requirement of as little as 3.5 percent for FHA and VA lending programs, which serve the needs

[40] The reported nonconventional share of refinance loans is lower than the actual share for the groups categorized by borrower income because, for most nonconventional refinance loans, income was not reported. Thus, when income was reported on a refinance loan, the loan is likely to be conventional.

of borrowers who have few assets to meet down-payment and closing-cost requirements.[41] This is no longer a clear advantage, as some conventional products now require as little as 3 percent down. FHA-insured and VA-guaranteed programs still have an advantage for borrowers in terms of looser FICO and DTI requirements.

## 5.5 Denial rates and reasons

Denial rates for home-purchase applications were generally lower in 2018 than in prior years.[42] The overall denial rate on applications for conventional and nonconventional home-purchase loans was 9.8 percent in 2018, 8.4 percent lower than in 2017 (Table 5). The denial rate for each racial/ethnic group declined from 2017 to 2018. These declines in 2018 continue a general trend in recent years of declining denial rates for home-purchase mortgages. Although denial rates on home-purchase applications have generally declined, the declines varied based on racial/ethnic group and type of loan. For example, for conventional and nonconventional applications combined, denial rates for non-Hispanic Whites declined from 8.8 percent in 2017 to 7.9 percent in 2018 (10 percent) compared to a much smaller decline for Hispanic Whites from 13.4 percent to 13.1 percent (2.2 percent). As a second example, the denial rate for all applications for conventional home-purchase loans decreased from 9.6 percent in 2017 to 8.4 percent in 2018, while the denial rate for all applications for nonconventional home-purchase loans decreased only from 12.8 percent to 12.7 percent.

[41] Findings of the Federal Reserve Board's Survey of Consumer Finances for 2017 indicate that income, liquid asset levels, and financial wealth holdings for minorities and lower-income groups are substantially smaller than they are for non-Hispanic White borrowers or higher-income populations, and the long-standing and substantial wealth disparities between families of different racial and ethnic groups have changed little in the past few years. See Board of Governors of the Federal Reserve System, "Recent Trends in Wealth-Holding by Race and Ethnicity: Evidence from the Survey of Consumer Finances," available at https://www.federalreserve.gov/econres/notes/feds-notes/recent-trends-in-wealth-holding-by-race-and-ethnicity-evidence-from-the-survey-of-consumer-finances-20170927.htm.

[42] Denial rates are calculated as the number of denied loan applications divided by the total number of applications, excluding withdrawn applications and application files closed for incompleteness.

**TABLE 5:** HOME-PURCHASE AND REFINANCE LOAN DENIAL RATES, BY LOAN TYPE AND BORROWER RACE AND ETHNICITY, 2004-2018 (PERCENT)

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. Home Purchase** | | | | | | | | | | | | | | | |
| *Conventional and nonconventional*[1] | | | | | | | | | | | | | | | |
| All applicants | 14.4 | 16.0 | 18.0 | 18.7 | 18.0 | 15.5 | 15.6 | 15.8 | 14.9 | 14.4 | 13.3 | 12.1 | 11.5 | 10.7 | 9.8 |
| Asian | 13.7 | 15.9 | 16.9 | 17.5 | 19.2 | 16.3 | 15.9 | 16.5 | 15.8 | 15.3 | 14.1 | 12.7 | 11.6 | 10.6 | 10.2 |
| Black or African American | 23.6 | 26.5 | 30.3 | 33.5 | 30.6 | 25.5 | 24.9 | 26.0 | 26.0 | 25.5 | 23.0 | 20.8 | 19.8 | 18.4 | 17.4 |
| Hispanic white | 18.3 | 21.1 | 25.1 | 29.5 | 28.3 | 22.2 | 21.8 | 21.1 | 20.2 | 20.5 | 18.4 | 16.2 | 15.0 | 13.4 | 13.1 |
| Non-Hispanic white | 11.1 | 12.2 | 12.9 | 13.3 | 14.0 | 12.8 | 13.0 | 13.1 | 12.5 | 12.0 | 11.1 | 10.0 | 9.5 | 8.8 | 7.9 |
| Other minority[2] | 19.4 | 20.8 | 24.0 | 26.7 | 25.5 | 21.2 | 22.0 | 20.9 | 20.8 | 21.2 | 19.0 | 17.2 | 16.6 | 14.7 | 14.3 |
| *Conventional only* | | | | | | | | | | | | | | | |
| All applicants | 14.6 | 16.3 | 18.5 | 19.0 | 18.3 | 15.8 | 15.2 | 15.1 | 13.6 | 12.9 | 11.9 | 10.8 | 10.2 | 9.6 | 8.4 |
| Asian | 13.7 | 16.0 | 17.1 | 17.5 | 19.1 | 15.8 | 14.9 | 15.5 | 14.4 | 14.2 | 13.3 | 11.9 | 10.9 | 10.1 | 9.6 |
| Black or African American | 25.0 | 27.8 | 31.9 | 35.7 | 37.6 | 35.8 | 33.7 | 33.2 | 32.0 | 28.5 | 25.1 | 23.3 | 22.0 | 19.2 | 16.9 |
| Hispanic white | 18.6 | 21.4 | 25.7 | 30.5 | 32.5 | 26.9 | 24.9 | 24.2 | 22.4 | 21.5 | 18.9 | 17.2 | 15.4 | 13.5 | 12.1 |
| Non-Hispanic white | 11.2 | 12.3 | 13.2 | 13.3 | 14.1 | 13.3 | 12.9 | 12.7 | 11.6 | 10.8 | 9.9 | 9.1 | 8.5 | 7.8 | 6.8 |
| Other minority[2] | 19.7 | 21.2 | 24.8 | 27.8 | 29.0 | 25.9 | 28.1 | 24.6 | 23.6 | 22.5 | 20.2 | 18.2 | 16.8 | 14.8 | 13.4 |
| *Nonconventional only*[1] | | | | | | | | | | | | | | | |
| All applicants | 13.3 | 12.5 | 12.1 | 16.2 | 17.4 | 15.3 | 16.0 | 16.5 | 16.3 | 16.8 | 15.8 | 13.9 | 13.4 | 12.8 | 12.7 |
| Asian | 12.6 | 11.6 | 10.6 | 15.5 | 20.2 | 17.7 | 18.7 | 19.3 | 20.2 | 20.6 | 18.9 | 16.2 | 14.9 | 14.1 | 14.2 |
| Black or African American | 17.7 | 16.8 | 16.2 | 22.8 | 25.3 | 22.6 | 22.7 | 23.9 | 24.0 | 24.1 | 21.9 | 19.7 | 18.8 | 17.9 | 17.7 |
| Hispanic white | 16.3 | 17.2 | 15.7 | 20.5 | 23.1 | 20.4 | 20.7 | 19.9 | 19.3 | 19.9 | 18.0 | 15.6 | 14.7 | 13.4 | 14.3 |
| Non-Hispanic white | 10.7 | 10.2 | 10.0 | 13.1 | 13.9 | 12.5 | 13.0 | 13.6 | 13.7 | 14.1 | 13.4 | 11.7 | 11.2 | 10.6 | 10.5 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other minority[2] | 16.8 | 16.3 | 15.2 | 18.6 | 20.9 | 18.7 | 18.7 | 18.8 | 18.9 | 20.1 | 17.9 | 16.2 | 16.4 | 14.7 | 15.2 |
| **B. Refinance** | | | | | | | | | | | | | | | |
| *Conventional and nonconventional[1]* | | | | | | | | | | | | | | | |
| All applicants | 29.5 | 32.6 | 35.4 | 39.6 | 37.7 | 24.0 | 23.3 | 23.8 | 19.9 | 23.3 | 31.0 | 27.2 | 29.9 | 26.3 | 29.0 |
| Asian | 18.8 | 23.5 | 27.5 | 32.6 | 32.5 | 21.4 | 19.5 | 20.1 | 17.3 | 21.0 | 28.1 | 23.8 | 25.1 | 24.7 | 28.0 |
| Black or African American | 39.9 | 42.2 | 44.1 | 52.0 | 56.0 | 42.2 | 41.7 | 40.0 | 32.8 | 35.0 | 45.8 | 43.1 | 45.9 | 39.1 | 44.1 |
| Hispanic white | 28.7 | 30.1 | 33.2 | 43.0 | 49.1 | 36.4 | 33.4 | 33.2 | 27.5 | 29.6 | 36.7 | 32.5 | 33.8 | 30.1 | 32.0 |
| Non-Hispanic white | 24.1 | 26.9 | 30.1 | 33.7 | 32.2 | 20.7 | 20.6 | 21.3 | 17.8 | 20.5 | 27.5 | 24.1 | 26.9 | 22.9 | 24.9 |
| Other minority[2] | 33.7 | 35.5 | 40.6 | 52.0 | 57.4 | 37.3 | 35.4 | 34.4 | 30.0 | 32.1 | 41.6 | 40.1 | 44.2 | 37.2 | 42.2 |
| *Conventional only* | | | | | | | | | | | | | | | |
| All applicants | 30.1 | 32.9 | 35.6 | 39.9 | 37.0 | 22.1 | 21.2 | 22.3 | 19.4 | 22.5 | 29.6 | 26.4 | 28.8 | 24.0 | 24.8 |
| Asian | 18.8 | 23.5 | 27.5 | 32.5 | 31.5 | 20.2 | 18.5 | 19.4 | 17.0 | 20.5 | 27.2 | 23.2 | 23.7 | 23.4 | 25.4 |
| Black or African American | 41.7 | 43.0 | 44.7 | 53.3 | 60.9 | 48.6 | 41.4 | 40.6 | 34.8 | 36.0 | 47.0 | 47.7 | 52.3 | 39.3 | 39.9 |
| Hispanic white | 29.3 | 30.2 | 33.3 | 43.2 | 50.2 | 38.9 | 33.6 | 33.5 | 28.9 | 30.6 | 37.3 | 34.8 | 35.2 | 30.0 | 30.1 |
| Non-Hispanic white | 24.6 | 27.1 | 30.4 | 33.9 | 31.5 | 19.1 | 18.9 | 20.1 | 17.4 | 19.9 | 26.2 | 23.2 | 25.7 | 20.6 | 21.2 |
| Other minority[2] | 34.5 | 35.7 | 40.9 | 52.6 | 59.4 | 38.4 | 34.8 | 34.4 | 31.1 | 32.6 | 40.9 | 41.2 | 45.9 | 34.5 | 37.1 |
| *Nonconventional only[1]* | | | | | | | | | | | | | | | |
| All applicants | 15.0 | 20.1 | 21.9 | 31.6 | 40.9 | 31.1 | 33.3 | 32.2 | 22.2 | 26.7 | 36.5 | 29.6 | 33.0 | 32.4 | 39.6 |
| Asian | 15.0 | 20.0 | 22.0 | 38.5 | 48.9 | 37.2 | 34.2 | 32.7 | 22.2 | 26.9 | 37.5 | 28.8 | 36.7 | 34.1 | 43.7 |
| Black or African American | 17.5 | 23.6 | 24.6 | 33.7 | 43.5 | 35.1 | 42.2 | 39.1 | 29.5 | 33.1 | 43.9 | 37.5 | 38.8 | 38.8 | 48.9 |
| Hispanic white | 15.7 | 23.6 | 26.3 | 34.6 | 43.4 | 31.4 | 33.0 | 32.3 | 23.3 | 26.6 | 34.5 | 27.1 | 30.5 | 30.6 | 37.3 |
| Non-Hispanic white | 12.0 | 17.6 | 19.7 | 28.3 | 36.1 | 27.4 | 29.3 | 29.0 | 19.7 | 23.8 | 33.7 | 26.9 | 31.0 | 29.7 | 36.0 |
| Other minority[2] | 15.2 | 25.8 | 22.2 | 34.8 | 45.4 | 34.1 | 37.0 | 34.4 | 26.6 | 30.6 | 43.8 | 37.6 | 41.2 | 41.9 | 50.2 |

NOTE: First-lien mortgages for one-to-four-family, owner-occupied, site-built homes. For a description of how borrowers are categorized by race and ethnicity, see table 2, note 1.

(1) Nonconventional loans are those insured by the FHA or backed by guarantees from the VA, the FSA, or the RHS.

(2) See table 2, note 2.

Unlike for home-purchase loans, denial rates on refinance applications generally increased. For applications for conventional and nonconventional refinance loans (Table 5), denial rates increased from 26.3 percent in 2017 to 29.0 percent in 2018. Denial rates for all refinance loan types increased between 2017 and 2018 for all racial and ethnic groups with the largest change being a 28.1 percent increase for Asian applicants for nonconventional refinance loans. Overall, refinance applications were denied at about 3 times the rate of home-purchase loan applications.

Variations in raw denial rates over time reflect not only changes in credit standards, but also changes in the demand for credit and in the composition of borrowers applying for mortgages. For example, the denial rate on applications for conventional home-purchase loans was lower in 2018 than during the housing boom years, even though most measures of credit availability suggest that credit standards were tighter in 2018.[43] This may stem from a relatively large drop in applications from riskier applicants or in applications that are risky for other reasons, such as documentation or collateral risk.

As in past years, Black and Hispanic White borrowers had notably higher denial rates in 2018 than non-Hispanic White and Asian borrowers. For example, the denial rates for conventional home-purchase loans were 16.9 percent for Black borrowers and 12.1 percent for Hispanic White borrowers. In contrast, denial rates for such loans were 9.6 percent for Asian borrowers and 6.8 percent for non-Hispanic White borrowers. Previous research and experience in the fair lending supervisory process show that differences in denial rates and in the incidence of higher-priced lending (the topic of the next subsection) among racial and ethnic groups stem, at least in part, from factors related to credit risk.[44] Those factors—such

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43 Both the Mortgage Bankers Association (MBA) and the Urban Institute publish indexes of mortgage credit availability. Each index suggests that underwriting standards have been much tighter since the crisis. For the most recent references, see Goodman, Laurie, Wei Li, Jun Zhu, and Bing Bai, "Housing Affordability – Local and National Perspective," Washington: Urban Institute Working Paper (March 2018), https://www.urban.org/research/publication/housing-affordability-local-and-national-perspectives. Information about MBA's mortgage credit availability index is available at https://www.mba.org/news-research-and-resources/research-and-economics/single-family-research/mortgage-credit-availability-index. Although tighter than during the mid-2000s, both of these indexes have shown slight easing since the crisis. In addition, the October 2018 Senior Loan Officer Opinion Survey on Bank Lending Practices suggested that mortgage credit conditions continued to slowly ease throughout 2018, although credit remained more difficult to obtain for individuals with lower credit scores or hard-to-document incomes. Much of the recent easing in mortgage underwriting that occurred over the course of 2018 was for loans that were eligible for purchase by the GSEs. The survey is available on the Federal Reserve Board's website at https://www.federalreserve.gov/data/sloos.htm.

44 HMDA data are regularly used by bank examiners in fair lending examination and enforcement processes. When examiners for the federal banking agencies evaluate an institution's fair lending risk,

as credit history (including credit score), ratio of total monthly debt to total monthly income (DTI ratio), and CLTV ratio—are now revealed for the first time in the 2018 HMDA data.[45]

Historically, lenders could, but were not required to, report up to three reasons for denying a mortgage application, selecting from nine potential denial reasons. The 2015 HMDA rule changed reporting of denial reasons from optional to mandatory, required reporting of up to four denial reasons, and added a mandatory free-form text field to fill in when reporting a denial for "other" reasons. So, unlike for 2017 when only 72.1 percent of denied home-purchase applications and 66.2 percent of denied refinance applications had at least one reported denial reason, all denials in the 2018 HMDA data included denial reason data as shown in Table 6 (note that the sum across columns can add up to more than 100 percent because lenders can cite more than one denial reason). The four most frequently cited denial reasons for both home-purchase and refinance loans were the applicant's credit history, DTI ratio, collateral, and credit application incomplete. The DTI ratio was overwhelmingly the most common reason for denial of home-purchase applications, which is somewhat surprising given the DTI ratio at origination for home purchase loans has recently been trending up.[46] For refinance applications that were turned down, credit history was cited with a frequency similar to DTI. In addition, for denied home-purchase applications, prospective lenders were more likely to cite collateral as the denial reason on conventional than nonconventional applications. For denied refinance applications, prospective lenders generally were more likely to cite DTI ratio, insufficient cash, unverifiable information, and credit application incomplete as denial reasons on conventional than nonconventional applications.

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they analyze HMDA price data, loan application outcomes, and explanatory factors, in conjunction with other information and risk factors which can be drawn directly from loan files or electronic records maintained by lenders, as directed by the Interagency Fair Lending Examination Procedures (available at https://www.ffiec.gov/PDF/fairlend.pdf).

[45] To protect applicant and borrower privacy, credit score is excluded from the 2018 loan-level HMDA data made available to the public and DTI is disclosed binned into ranges.

[46] The Urban Institute's Monthly Chartbook (https://www.urban.org/sites/default/files/publication/100299/may_chartbook_2019.pdf) shows the median DTI at origination for purchase loans has generally trended up recently, increasing from approximately 35 percent in 2013 to nearly 40 percent in 2018.

**TABLE 6:** REASONS FOR DENIAL OF HOME-PURCHASE AND REFINANCE LOANS, BY LOAN TYPE AND BORROWER RACE AND ETHNICITY, 2018 (PERCENT)

| | Debt-to-income ratio | Employ-ment history | Credit history | Collateral | Insuf-ficient cash | Unveri-fiable informa-tion | Credit applica-tion incom-plete | Mortgage insurance denied | Other | No reason given |
|---|---|---|---|---|---|---|---|---|---|---|
| **A. Home Purchase** | | | | | | | | | | |
| *Conventional and nonconventional*[1] | | | | | | | | | | |
| All applicants | 32.6 | 5.1 | 23.1 | 16.9 | 9.9 | 8.4 | 13.0 | 0.4 | 12.4 | 0.0 |
| Asian | 39.8 | 6.1 | 12.6 | 13.6 | 11.5 | 13.0 | 15.6 | 0.3 | 12.7 | 0.0 |
| Black or African American | 35.6 | 4.7 | 30.4 | 13.8 | 10.5 | 7.5 | 10.1 | 0.5 | 12.6 | 0.0 |
| Hispanic white | 35.9 | 5.7 | 21.5 | 17.0 | 10.5 | 10.6 | 10.4 | 0.5 | 14.0 | 0.0 |
| Non-Hispanic white | 30.4 | 5.1 | 23.0 | 18.3 | 9.5 | 7.5 | 13.1 | 0.5 | 12.2 | 0.0 |
| Other minority[2] | 34.5 | 5.3 | 28.9 | 14.6 | 10.8 | 8.0 | 11.0 | 0.5 | 13.4 | 0.0 |
| *Conventional only* | | | | | | | | | | |
| All applicants | 32.4 | 4.1 | 20.1 | 18.7 | 10.2 | 8.7 | 13.6 | 0.5 | 11.6 | 0.0 |
| Asian | 39.4 | 5.5 | 11.5 | 14.1 | 12.0 | 13.3 | 16.1 | 0.4 | 12.6 | 0.0 |
| Black or African American | 33.5 | 3.4 | 29.3 | 17.1 | 10.4 | 6.9 | 9.7 | 0.7 | 12.2 | 0.0 |
| Hispanic white | 34.3 | 4.3 | 20.0 | 19.4 | 10.6 | 11.0 | 9.8 | 0.5 | 13.4 | 0.0 |
| Non-Hispanic white | 31.0 | 4.1 | 20.2 | 20.0 | 9.8 | 7.9 | 13.4 | 0.5 | 11.1 | 0.0 |
| Other minority[2] | 34.5 | 4.8 | 27.5 | 15.6 | 10.7 | 7.8 | 9.8 | 0.6 | 14.0 | 0.0 |
| *Nonconventional only*[1] | | | | | | | | | | |
| All applicants | 32.8 | 6.3 | 26.9 | 14.5 | 9.5 | 7.9 | 12.3 | 0.4 | 13.4 | 0.0 |
| Asian | 41.9 | 9.1 | 18.4 | 10.8 | 9.3 | 11.2 | 13.2 | 0.3 | 13.4 | 0.0 |

| | Debt-to-income ratio | Employ-ment history | Credit history | Collateral | Insuf-ficient cash | Unveri-fiable informa-tion | Credit applica-tion incom-plete | Mortgage insurance denied | Other | No reason given |
|---|---|---|---|---|---|---|---|---|---|---|
| Black or African American | 36.9 | 5.5 | 31.1 | 11.7 | 10.6 | 7.9 | 10.4 | 0.4 | 12.7 | 0.0 |
| Hispanic white | 37.3 | 6.9 | 22.7 | 15.0 | 10.4 | 10.3 | 10.8 | 0.4 | 14.4 | 0.0 |
| Non-Hispanic white | 29.5 | 6.5 | 27.1 | 16.0 | 8.9 | 6.9 | 12.5 | 0.4 | 13.8 | 0.0 |
| Other minority(2) | 34.5 | 5.7 | 30.2 | 13.8 | 10.9 | 8.3 | 12.0 | 0.4 | 12.9 | 0.0 |
| **B. Refinance** | | | | | | | | | | |
| *Conventional and nonconventional(1)* | | | | | | | | | | |
| All applicants | 26.2 | 1.3 | 28.2 | 18.2 | 3.5 | 3.7 | 19.1 | 0.1 | 15.1 | 0.0 |
| Asian | 37.5 | 1.9 | 22.4 | 13.2 | 5.0 | 6.2 | 18.8 | 0.1 | 15.2 | 0.0 |
| Black or African American | 24.6 | 0.8 | 37.0 | 17.1 | 3.6 | 3.1 | 15.0 | 0.1 | 15.9 | 0.0 |
| Hispanic white | 32.0 | 1.8 | 31.1 | 14.2 | 4.3 | 5.3 | 15.6 | 0.1 | 16.2 | 0.0 |
| Non-Hispanic white | 26.0 | 1.4 | 28.0 | 19.2 | 3.4 | 3.8 | 18.1 | 0.1 | 14.9 | 0.0 |
| Other minority(2) | 27.1 | 1.0 | 32.5 | 15.9 | 3.2 | 3.6 | 17.9 | 0.1 | 16.4 | 0.0 |
| *Conventional only* | | | | | | | | | | |
| All applicants | 29.1 | 1.4 | 27.0 | 17.2 | 3.9 | 4.2 | 19.5 | 0.1 | 14.7 | 0.0 |
| Asian | 39.3 | 2.1 | 20.6 | 12.9 | 5.6 | 6.6 | 19.6 | 0.1 | 14.6 | 0.0 |
| Black or African American | 27.6 | 0.9 | 36.9 | 15.8 | 4.1 | 3.3 | 15.4 | 0.1 | 17.0 | 0.0 |
| Hispanic white | 35.0 | 1.8 | 31.1 | 13.2 | 4.7 | 5.5 | 15.0 | 0.1 | 16.2 | 0.0 |
| Non-Hispanic white | 28.6 | 1.5 | 26.7 | 18.5 | 3.7 | 4.3 | 18.5 | 0.1 | 14.3 | 0.0 |
| Other minority(2) | 29.3 | 1.1 | 30.4 | 14.9 | 4.1 | 3.9 | 18.8 | 0.1 | 17.3 | 0.0 |
| *Nonconventional only(1)* | | | | | | | | | | |
| All applicants | 21.4 | 1.1 | 30.3 | 19.8 | 2.8 | 3.0 | 18.4 | 0.1 | 15.8 | 0.0 |

| | Debt-to-income ratio | Employ-ment history | Credit history | Collateral | Insuf-ficient cash | Unveri-fiable informa-tion | Credit applica-tion incom-plete | Mortgage insurance denied | Other | No reason given |
|---|---|---|---|---|---|---|---|---|---|---|
| Asian | 31.1 | 1.4 | 28.8 | 13.9 | 2.9 | 4.6 | 15.7 | 0.0 | 17.2 | 0.0 |
| Black or African American | 21.8 | 0.8 | 37.1 | 18.3 | 3.1 | 2.9 | 14.6 | 0.0 | 15.0 | 0.0 |
| Hispanic white | 25.1 | 1.6 | 31.1 | 16.6 | 3.4 | 4.9 | 17.0 | 0.1 | 16.3 | 0.0 |
| Non-Hispanic white | 21.4 | 1.2 | 30.2 | 20.5 | 2.9 | 3.0 | 17.6 | 0.1 | 15.8 | 0.0 |
| Other minority[2] | 24.6 | 0.8 | 34.9 | 17.1 | 2.2 | 3.2 | 16.7 | 0.1 | 15.4 | 0.0 |

NOTE: Denied first-lien mortgage applications for one-to-four-family, owner-occupied, site-built homes. Columns sum to more than 100 because lenders may report up to three denial reasons. For a description of how borrowers are categorized by race and ethnicity, see table 2, note 1.

(1) See table 5, note 1.

(2) See table 2, note 2.

Denial reasons vary to some degree across racial and ethnic groups. The DTI ratio was cited most often as a denial reason for home-purchase applicants in all racial and ethnic groups. Credit history was the second most common denial reason cited for home-purchase applicants for all groups except Asians, for whom incomplete application was the second most common reason for conventional loans, as well as conventional and nonconventional loans combined.

# 6. Incidence of higher-priced lending

The provisions of the 2015 HMDA rule concerning the collection of data, which first applied to data collected in 2018, implemented the DFA's mandate that rate spread be reported for most originations, regardless of rate.[47] Rate spread reporting is not required for purchased loans, reverse mortgages, assumptions, and loans that are not subject to Regulation Z. Prior to 2018, Regulation C required reporters to report rate spread data only on higher-priced mortgage loans (HPML). Prior to October 2009, loans were classified as higher-priced if the spread between the Annual Percentage Rate (APR) and the rate on a Treasury bond of comparable term exceeded three percentage points for first-lien loans or five percentage points for junior-lien loans. Following a change to Regulation C in October 2009, loans were classified as higher-priced if the APR exceeded the average prime offer rate (APOR) for loans of a similar type by at least 1.5 percentage points for first-lien loans or 3.5 percentage points for junior-lien loans. Since the 2018 implementation of the DFA's requirement to report rate spread regardless of loan price, Regulation C no longer specifies a threshold for defining higher-priced loans. To compare 2018 data to data from earlier years, the Bureau defines higher-priced loans according to the post-2009 classification. The APR of a closed-end mortgage differs from the interest rate because an APR takes certain up-front fees and loan costs such as discount points and mortgage origination charges into account. The APOR, which is now published weekly by the Bureau, is an estimate of the APR on loans being offered to high-quality prime borrowers based on the contract interest rates and discount points reported by Freddie Mac in its Primary Mortgage Market Survey, and from the Bureau's own survey which collects contract interest rates and discount points on one-year ARMs.[48] Given the change from a comparison of APR against a Treasury bond rate to a

[47] The Bureau's August 2018 Interpretive and Procedural rule clarified and implemented the partial exemptions under the EGRRCPA. Specifically, the rule clarified that certain insured DIs and insured credit unions are exempt from the requirement to collect and report data on 26 of the 27 new data points added under the 2015 HMDA rule for certain transactions. Rate spread was one of these data points, so exempt institutions reported "Exempt" for rate spread for covered transactions.

[48] See Freddie Mac's, "Primary Mortgage Market Survey," available at www.freddiemac.com/pmms; and the Bureau's rate spread calculator, available at https://ffiec.cfpb.gov/tools/rate-spread.

comparison against APOR, it is difficult to compare rates of higher-priced lending pre- and post-2009.[49]

Table 7 provides rates of higher-priced mortgage lending by race/ethnicity and loan type from 2004 to 2018 for home-purchase loans and refinance loans. Overall, the share of loans that were higher-priced increased in 2018. The percentage of home-purchase loans (again, first liens for one-to-four-family, owner-occupied, site-built properties) above the higher-priced threshold increased from 8.4 percent in 2017 to 10.6 percent in 2018 (Table 7).[50] Except for non-Hispanic Whites for conventional only loans, the incidence of higher-priced lending increased across all racial/ethnic groups and loan types, with the largest increases for nonconventional home-purchase loans across all groups.

Refinance loans in general were less likely than home-purchase loans to be higher-priced, but both types of loans were more likely to be higher-priced in 2018 than in 2017. For example, the share of all refinance loans that were higher-priced rose from 3.0 percent in 2017 to 4.0 percent in 2018 (Table 7). Again, increases were generally larger for nonconventional loans. For example, the higher-priced share of nonconventional refinance loans across all racial/ethnic groups increased between 2.7 and 4.7 percentage points compared to increases between 0.3 and 1.1 percentage points for conventional refinance loans.

Table 7 also shows that, as in earlier years, Black and Hispanic White borrowers were more likely to have higher-priced conventional and nonconventional loans in 2018. For home-purchase loans, 22.9 percent of loans to Black borrowers and 23.7 percent of loans to Hispanic White borrowers were higher-priced, compared with 8.2 percent of loans to non-Hispanic Whites. For refinance loans, 6.8 percent of loans to Black borrowers and 5.8 percent of loans to Hispanic White borrowers were higher-priced, in contrast to 3.9 percent for non-Hispanic Whites.

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[49] For more detailed discussion on the change of APR spread methodology in 2009, see Avery, Robert B., et al., "The 2009 HMDA Data: The Mortgage Market in a Time of Low Interest Rates and Economic Distress," available at https://www.federalreserve.gov/pubs/bulletin/2010/articles/2009HMDA/default.htm.

[50] The rate spread data point is one of the data points covered by the EGRRCPA, so HMDA reporters eligible for the exemption under the EGRRPCA are not required to report rate spread data. The results in Table 7 for 2018 include originations from these reporters in all calculations.

**TABLE 7:** INCIDENCE OF HIGHER-PRICED HOME-PURCHASE AND REFINANCE LENDING, BY LOAN TYPE AND BORROWER RACE AND ETHNICITY, 2004-2018 (PERCENT)

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. Home Purchase** | | | | | | | | | | | | | | | |
| *Conventional and nonconventional*[1] | | | | | | | | | | | | | | | |
| All applicants | 9.8 | 22.5 | 23.2 | 12.7 | 8.1 | 4.6 | 2.2 | 3.3 | 3.1 | 7.1 | 11.6 | 7.6 | 7.7 | 8.4 | 10.6 |
| Asian | 5.5 | 16.3 | 16.4 | 7.6 | 4.0 | 2.4 | 1.0 | 1.5 | 1.4 | 3.1 | 5.2 | 3.6 | 3.7 | 4.2 | 5.0 |
| Black or African American | 24.3 | 46.7 | 46.4 | 27.6 | 14.5 | 7.1 | 3.0 | 5.0 | 5.3 | 14.3 | 25.6 | 16.2 | 15.8 | 18.0 | 22.9 |
| Hispanic white | 17.5 | 42.0 | 43.3 | 25.9 | 15.8 | 8.1 | 3.9 | 6.1 | 5.9 | 16.9 | 28.5 | 18.5 | 18.0 | 19.3 | 23.7 |
| Non-Hispanic white | 7.8 | 15.5 | 16.0 | 9.6 | 7.2 | 4.3 | 2.2 | 3.1 | 2.9 | 6.2 | 9.5 | 6.3 | 6.3 | 6.7 | 8.2 |
| Other minority[2] | 14.4 | 30.3 | 30.7 | 16.1 | 9.1 | 5.3 | 2.3 | 3.5 | 3.4 | 8.8 | 13.7 | 8.9 | 9.2 | 10.4 | 13.2 |
| *Conventional only* | | | | | | | | | | | | | | | |
| All applicants | 11.0 | 24.5 | 25.3 | 14.0 | 7.3 | 4.6 | 3.3 | 3.8 | 3.2 | 2.9 | 3.1 | 3.2 | 3.7 | 4.2 | 4.4 |
| Asian | 5.6 | 16.6 | 16.7 | 7.7 | 3.3 | 1.9 | 1.0 | 1.3 | 1.2 | 1.1 | 1.5 | 2.1 | 2.5 | 3.1 | 3.3 |
| Black or African American | 30.6 | 54.1 | 53.4 | 34.0 | 17.4 | 8.7 | 6.1 | 8.0 | 6.7 | 6.1 | 7.7 | 6.8 | 8.3 | 10.3 | 11.3 |
| Hispanic white | 20.0 | 45.3 | 46.3 | 28.9 | 17.7 | 11.0 | 9.6 | 10.7 | 8.7 | 7.3 | 6.5 | 8.3 | 10.1 | 11.5 | 12.3 |
| Non-Hispanic white | 8.6 | 16.9 | 17.5 | 10.5 | 6.5 | 4.8 | 3.4 | 3.9 | 3.2 | 2.9 | 3.0 | 2.9 | 3.3 | 3.5 | 3.4 |
| Other minority[2] | 16.1 | 33.3 | 33.6 | 18.5 | 9.5 | 6.7 | 4.7 | 5.5 | 5.1 | 4.9 | 5.0 | 4.9 | 5.6 | 7.4 | 7.6 |
| *Nonconventional only*[1] | | | | | | | | | | | | | | | |
| All applicants | 1.2 | 0.9 | 1.8 | 3.0 | 9.5 | 4.6 | 1.3 | 2.7 | 3.0 | 13.9 | 26.3 | 14.5 | 14.0 | 15.7 | 23.1 |
| Asian | 2.4 | 0.6 | 0.8 | 1.3 | 8.2 | 3.9 | 0.8 | 2.0 | 1.9 | 13.4 | 26.3 | 11.4 | 10.2 | 11.7 | 18.0 |
| Black or African American | 1.4 | 1.6 | 2.5 | 4.5 | 12.8 | 6.8 | 2.4 | 4.3 | 4.9 | 17.6 | 34.0 | 20.2 | 19.2 | 22.2 | 30.4 |
| Hispanic white | 2.0 | 1.4 | 3.5 | 4.5 | 14.0 | 7.1 | 2.2 | 4.5 | 4.8 | 22.5 | 43.4 | 24.6 | 23.3 | 25.6 | 35.7 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-Hispanic white | 1.0 | 0.7 | 1.5 | 2.5 | 8.4 | 3.9 | 1.0 | 2.3 | 2.6 | 12.1 | 22.5 | 12.2 | 11.7 | 13.1 | 19.6 |
| Other minority[2] | 4.4 | 0.7 | 2.1 | 2.4 | 8.8 | 4.7 | 1.2 | 2.5 | 2.4 | 11.9 | 21.0 | 12.2 | 12.2 | 13.2 | 19.0 |
| **B. Refinance** | | | | | | | | | | | | | | | |
| *Conventional and nonconventional*[1] | | | | | | | | | | | | | | | |
| All applicants | 14.5 | 25.0 | 30.3 | 21.0 | 10.9 | 3.8 | 1.8 | 2.1 | 1.5 | 1.9 | 3.3 | 2.5 | 2.0 | 3.0 | 4.0 |
| Asian | 5.8 | 15.1 | 19.5 | 12.5 | 3.1 | 0.9 | 0.4 | 0.5 | 0.4 | 0.5 | 1.1 | 0.7 | 0.6 | 1.3 | 2.6 |
| Black or African American | 30.0 | 46.2 | 50.7 | 38.1 | 22.8 | 9.0 | 6.5 | 6.8 | 4.1 | 3.8 | 5.7 | 5.1 | 3.9 | 4.7 | 6.8 |
| Hispanic white | 18.2 | 32.6 | 36.9 | 26.5 | 15.1 | 7.0 | 4.4 | 4.4 | 2.6 | 3.1 | 4.8 | 3.9 | 3.2 | 4.1 | 5.8 |
| Non-Hispanic white | 12.3 | 20.4 | 25.0 | 17.6 | 10.2 | 3.7 | 1.8 | 2.2 | 1.5 | 2.0 | 3.4 | 2.5 | 2.1 | 3.1 | 3.9 |
| Other minority[2] | 17.6 | 26.9 | 32.3 | 23.8 | 13.9 | 4.7 | 2.5 | 2.6 | 2.0 | 2.2 | 3.1 | 2.8 | 2.2 | 3.0 | 4.5 |
| *Conventional only* | | | | | | | | | | | | | | | |
| All applicants | 15.2 | 25.7 | 31.0 | 21.8 | 10.4 | 3.1 | 1.3 | 1.5 | 1.2 | 1.5 | 2.2 | 1.6 | 1.5 | 2.2 | 2.7 |
| Asian | 5.8 | 15.2 | 19.6 | 12.5 | 2.9 | 0.7 | 0.2 | 0.3 | 0.3 | 0.3 | 0.7 | 0.4 | 0.4 | 0.9 | 2.0 |
| Black or African American | 33.7 | 49.0 | 52.8 | 41.5 | 27.6 | 9.9 | 4.0 | 4.2 | 2.9 | 3.3 | 3.8 | 3.1 | 3.2 | 3.8 | 4.9 |
| Hispanic white | 19.2 | 33.4 | 37.5 | 27.3 | 16.0 | 7.2 | 3.3 | 3.3 | 2.3 | 2.4 | 2.8 | 2.4 | 2.3 | 3.2 | 4.2 |
| Non-Hispanic white | 12.8 | 20.9 | 25.6 | 18.2 | 9.8 | 3.1 | 1.3 | 1.6 | 1.2 | 1.6 | 2.3 | 1.7 | 1.6 | 2.3 | 2.6 |
| Other minority[2] | 18.2 | 27.7 | 32.9 | 24.5 | 14.7 | 4.8 | 1.9 | 2.2 | 1.7 | 2.0 | 2.1 | 2.0 | 1.7 | 2.3 | 3.3 |
| *Nonconventional only*[1] | | | | | | | | | | | | | | | |
| All applicants | 1.5 | 0.9 | 3.1 | 6.6 | 13.2 | 6.7 | 4.9 | 5.9 | 3.2 | 3.9 | 8.3 | 5.4 | 3.9 | 5.4 | 8.4 |
| Asian | 3.6 | 2.1 | 2.5 | 4.9 | 8.9 | 4.8 | 3.1 | 4.0 | 1.8 | 2.6 | 7.2 | 3.4 | 2.7 | 4.5 | 7.6 |
| Black or African American | 1.0 | 1.2 | 4.1 | 7.8 | 15.2 | 8.2 | 9.9 | 10.9 | 6.0 | 4.6 | 8.5 | 7.1 | 4.4 | 5.7 | 9.2 |
| Hispanic white | 2.0 | 0.9 | 2.6 | 6.2 | 11.6 | 6.6 | 7.4 | 7.9 | 3.6 | 5.1 | 12.2 | 7.0 | 5.1 | 6.5 | 11.1 |
| Non-Hispanic white | 1.3 | 0.7 | 2.8 | 6.0 | 12.1 | 6.5 | 4.6 | 5.9 | 3.3 | 4.2 | 8.9 | 5.5 | 4.0 | 5.8 | 8.5 |

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other minority[2] | 8.1 | 3.9 | 9.6 | 9.9 | 10.5 | 4.5 | 4.6 | 4.3 | 2.9 | 2.8 | 6.0 | 4.4 | 3.0 | 4.3 | 6.9 |

NOTE: First-lien mortgages for one-to-four-family, owner-occupied, site-built homes. For a description of how borrowers are categorized by race and ethnicity, see table 2, note 1.

(1) See table 5, note 1.

(2) See table 2, note 2.

Table 8 shows the distribution of higher-priced loans by loan type and purpose and includes results for loans for manufactured homes. In 2018, 37.8 percent of FHA, site-built, home-purchase loans were higher-priced, up from 24.8 percent in 2017. These loans were much more likely to be higher-priced than conventional (4.4 percent) or VA/RHS/FSA (0.8 percent) loans, in part because of the relatively high up-front and annual MIPs charged by the FHA.

Manufactured housing loans were less than three percent of all owner-occupied originations, and the average manufactured housing loan size was much smaller than the average for mortgages on site-built homes. A much higher percentage of these manufactured housing loans were higher-priced than loans on site-built homes. Among manufactured housing home-purchase loans, 64.5 percent of conventional loans and 69.3 percent of FHA-insured loans were higher priced in 2018. In addition, among those conventional, manufactured housing, home-purchase loans that were higher priced, 46.2 percent exceeded the higher-priced threshold by five or more percentage points (Table 8). This is markedly higher than for all other loan types and purposes where higher-priced lending was much more concentrated near the 1.5 percentage point threshold.

With rate spread data for most originations following changes implemented by the 2015 HMDA rule, the Bureau can extend the analysis of the distribution of rate spread data below the 1.5 percentage point threshold for first-lien originations. One question of interest is whether a high incidence of loans were made just below this threshold. In general, this does not appear to be the case. For example, for all first-lien, one-to-four-family, owner-occupied, site-built, conventional, closed-end home-purchase originations, the median rate spread was 0.3 percentage points with 1.17 percent of these originations having a rate spread value within 10 basis points (bps) below the 1.5 percentage point threshold. Similar results appear for each of the origination categories in Table 8. FHA-insured originations was the only grouping with some evidence of a high incidence of loans made just below the threshold. For example, for all first lien, one-to-four-family, owner-occupied, site-built, FHA-insured, closed-end home-purchase originations, the median rate spread was 1.3 percentage points with 7.98 percent of these originations having a rate spread value within 10 bps below the 1.5 percentage point threshold. Other than home-purchase originations for manufactured homes, the results are similar for each of the FHA-insured groupings from Table 8.

One final issue the Bureau discusses related to HPMLs is the escrow requirement for these loans. Historically, HPMLs were required to maintain an escrow account for at least one year. The DFA extended this requirement to five years. In January 2013, the Bureau issued its original rule to implement this requirement. The original rule has been amended several times, including by the Amendments Relating to Small Creditors and Rural or Underserved Areas

Under the Truth in Lending Act (Regulation Z) final rule and the Operations in Rural Areas Under the Truth in Lending Act (Regulation Z) interim final rule. As amended, the rule generally exempts transactions where the creditor (1) originated at least one covered transaction secured by a first lien on a property in a rural or underserved area in the preceding calendar year (or either of the two preceding calendar years depending on when the application was received); (2) extended, together with its affiliates, 2,000 first-lien covered transactions or fewer in the preceding calendar year (or in either of the two preceding years depending on when the application was received) that were sold, assigned, or otherwise transferred to another person or subject at the time of consummation to a commitment to be acquired by another person; (3) had less than $2 billion (indexed for inflation) in total assets, including the assets of certain of its affiliates, in the preceding year (or in either of the two preceding years depending on when the application was received); and (4) do not escrow, and none of its affiliates escrow, for any extension of consumer credit secured by a dwelling that they service (with some exceptions). Section 108 of the EGRRCPA requires the Bureau to establish an additional exemption for any loan secured by a first lien on a consumer's principal dwelling made by certain insured DIs and insured credit unions that meet the first and fourth parts of the test above, have assets of $10 billion or less, originated 1,000 or fewer loans in the preceding calendar year secured by a first lien on a principal dwelling, and met certain other criteria. The Bureau estimates that approximately 160 insured DIs and insured credit unions stand to benefit from this additional exemption. Generally, these institutions would have between $2 billion and $10 billion in assets, originate 1,000 or fewer first-lien mortgages per year, and meet the first part of the test above.

**TABLE 8:** DISTRIBUTION OF LOANS WITH APOR SPREAD ABOVE 1.5 PERCENTAGE POINTS, BY PROPERTY TYPE, PURPOSE AND LOAN TYPE, 2018 (PERCENT)

| | Total Number | Loans with APOR spread above 1.5 percentage points[1] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number | Percent | Distribution, by percentage points of APOR spread | | | | | |
| | | | | 1.5-1.99 | 2-2.49 | 2.5-2.99 | 3-3.99 | 4-4.99 | 5 or more |
| SITE-BUILT HOMES | | | | | | | | | |
| *Home purchase* | | | | | | | | | |
| Conventional | 2,409,845 | 106,702 | 4.4 | 57.6 | 25.8 | 7.8 | 4.7 | 2.8 | 1.2 |
| FHA[2] | 713,760 | 269,803 | 37.8 | 69.8 | 25.1 | 4.4 | 0.3 | 0.2 | 0.1 |
| VA/RHS/FSA[3] | 471,978 | 3,967 | 0.8 | 81.9 | 2.9 | 0.4 | 0.8 | 12.3 | 1.8 |
| *Refinance* | | | | | | | | | |
| Conventional | 1,247,213 | 33,174 | 2.7 | 55.6 | 16.5 | 7.4 | 10.0 | 7.2 | 3.4 |
| FHA[2] | 212,919 | 30,596 | 14.4 | 78.4 | 17.7 | 3.2 | 0.7 | 0.0 | 0.1 |
| VA/RHS/FSA[3] | 171,257 | 1,736 | 1.0 | 88.1 | 9.4 | 1.0 | 0.3 | 1.1 | 0.2 |
| | | | | | | | | | |
| MANUFACTURED HOMES | | | | | | | | | |
| *Home purchase* | | | | | | | | | |
| Conventional | 80,160 | 51,731 | 64.5 | 7.0 | 7.8 | 7.8 | 14.9 | 16.4 | 46.2 |
| FHA[2] | 24,126 | 16,712 | 69.3 | 52.0 | 37.2 | 7.3 | 0.9 | 0.0 | 2.5 |
| VA/RHS/FSA[3] | 7,232 | 256 | 3.5 | 90.2 | 5.1 | 2.3 | 0.0 | 2.0 | 0.4 |
| *Refinance* | | | | | | | | | |
| Conventional | 20,425 | 4,296 | 21.0 | 36.8 | 18.8 | 10.1 | 11.8 | 8.8 | 13.7 |

| | Total Number | Loans with APOR spread above 1.5 percentage points[1] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number | Percent | Distribution, by percentage points of APOR spread | | | | | |
| | | | | 1.5-1.99 | 2-2.49 | 2.5-2.99 | 3-3.99 | 4-4.99 | 5 or more |
| FHA[2] | 5,925 | 2,174 | 36.7 | 62.3 | 31.3 | 4.9 | 1.5 | 0.0 | 0.0 |
| VA/RHS/FSA[3] | 4,364 | 357 | 8.2 | 82.4 | 15.4 | 2.0 | 0.3 | 0.0 | 0.0 |

NOTE: First-lien mortgages for one-to-four-family owner-occupied homes.

(1) Average prime offer rate (APOR) spread is the difference between the annual percentage rate on the loan and the APOR for loans of a similar type published weekly by the Federal Financial Institutions Examination Council. The threshold for first-lien loans is a spread of 1.5 percentage points.

(2) Loans insured by the FHA.

(3) Loans backed by guarantees from the U.S. Department of Veterans Affairs, the Rural Housing Service, or the Farm Service Agency.

# 6.1 HOEPA loans

Under the Home Ownership and Equity Protection Act (HOEPA), certain types of mortgage loans that have APRs or fees above specified levels (*i.e.*, HOEPA loans or high-cost mortgages) are subject to additional consumer protections, such as special disclosures and restrictions on loan features. In January 2013, the Bureau issued a final rule (2013 HOEPA Rule) implementing DFA amendments that extended HOEPA's protections from refinance and home equity loans to also include home-purchase loans and HELOCs and added new protections for high-cost mortgages, such as a pre-loan counseling requirement.[51] The rule became effective on January 10, 2014.[52]

The 2013 HOEPA Rule also changed the benchmarks used to define HOEPA loans. First, instead of comparing the loan's APR to the yield on comparable Treasury securities, high-cost mortgages now are identified by comparing a loan's APR with the APOR. Prior to 2014, HOEPA's protections as defined in the implementing regulation were triggered if the loan's APR was eight percentage points above the rate on a Treasury security of similar term for first liens, and ten percentage points for junior liens. HOEPA coverage now applies to first liens with an APR of more than 6.5 percentage points above the APOR. If the loan is a junior lien, or if the loan is a first lien that is less than $50,000 and secured by personal property (such as many manufactured homes), then the high-cost threshold is 8.5 percentage points above the APOR. Second, the 2013 HOEPA Rule changed the points and fees threshold that triggers HOEPA coverage.[53] The 2013 HOEPA Rule also added a third HOEPA coverage test based on a transaction's prepayment penalties.

Even at their peak of nearly 36,000 in 2005, HOEPA loans were never a large fraction of the mortgage market (Table 9). However, with an increase from 3,561 loans in 2017 to 6,681 loans in 2018, the volume of HOEPA loans has now increased for three consecutive years.

There was also variation in the volume of HOEPA loans across loan characteristics. Because under the 2015 HMDA rule there is no longer a requirement to report unsecured home improvement loans, the share of HOEPA loans dropped by 15.1 percentage points for home improvement loans and increased for both home purchase and refinance loans. In addition,

[51] 78 FR 6856 (Jan. 31, 2013).
[52] *Id.*; *see* 12 CFR 1026.31, 1026.32, and 1026.34 (2018).
[53] Under the 2013 HOEPA Rule, a loan is a high-cost mortgage if the points and fees exceed five percent of the total loan amount, for a loan amount equal to or more than $20,000; or eight percent of the total loan amount or $1,000 for a loan less than $20,000, with the loan amounts and $1,000 threshold adjusted annually for inflation from the base year of 2014.

junior liens, site-built homes, and loan amounts of greater than $50,000 each accounted for a larger share of HOEPA loans in 2018 than 2017.

**TABLE 9:** DISTRIBUTION OF HOEPA LOANS, BY LOAN CHARACTERISTIC, 2004-2018 (PERCENT EXCEPT AS NOTED)

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HOEPA loans (total)** | **24,437** | **35,985** | **15,195** | **10,780** | **8,577** | **6,446** | **3,379** | **2,373** | **2,193** | **1,868** | **1,271** | **1,252** | **1,880** | **3,561** | **6,681** |
| *Loan purpose* | | | | | | | | | | | | | | | |
| Home purchase | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 31.4 | 40.4 | 58.8 | 51.8 | 54.7 |
| Home improvement | 37.7 | 26.1 | 42.4 | 45.4 | 30.5 | 31.1 | 32.6 | 32.3 | 31.5 | 30.1 | 17.9 | 14.8 | 15.1 | 21.8 | 6.7 |
| Refinance | 62.3 | 73.9 | 57.6 | 54.6 | 69.5 | 68.9 | 67.4 | 67.7 | 68.5 | 69.9 | 50.7 | 44.8 | 26.2 | 26.4 | 38.6 |
| *Lien status* | | | | | | | | | | | | | | | |
| First | 55.5 | 60.5 | 53.6 | 52.8 | 78.5 | 84.1 | 83.4 | 82.8 | 84.6 | 84.2 | 90.3 | 88.6 | 90.0 | 94.0 | 91.2 |
| Junior | 44.5 | 39.5 | 46.4 | 47.2 | 21.5 | 15.9 | 16.6 | 17.2 | 15.4 | 15.8 | 9.7 | 11.4 | 10.0 | 6.0 | 8.8 |
| *Property type* | | | | | | | | | | | | | | | |
| Site built | 88.0 | 91.8 | 83.7 | 81.0 | 72.7 | 67.8 | 67.9 | 65.7 | 65.7 | 68.8 | 75.4 | 83.4 | 86.0 | 75.6 | 89.0 |
| Manufactured home | 12.0 | 8.2 | 16.3 | 19.0 | 27.3 | 32.2 | 32.1 | 34.3 | 34.3 | 31.2 | 24.6 | 16.6 | 14.0 | 24.4 | 11.0 |
| *Loan amount* | | | | | | | | | | | | | | | |
| Less than $50,000 | 72.4 | 48.4 | 72.1 | 74.3 | 66.7 | 72.5 | 76.8 | 77.8 | 75.6 | 71.3 | 52.9 | 36.4 | 35.4 | 38.4 | 22.3 |
| Greater than $50,000 | 27.6 | 51.6 | 27.9 | 25.7 | 33.3 | 27.5 | 23.2 | 22.2 | 24.4 | 28.7 | 47.1 | 63.6 | 64.6 | 61.6 | 77.7 |

NOTE: Mortgages for one-to-four-family homes. HOEPA loans are mortgages with terms that triggered the additional protections provided by the Home Ownership and Equity Protection Act.

# 7. Lending institutions

In total, 5,666 financial institutions reported HMDA data for 2018 (Table 10), down from 5,897 institutions reporting data for 2017. This decline was partially due to the overall decline of market volume (driven by the decline in refinance loan production) and consolidation among mortgage originators. The change to the coverage formula for nondepository institutions in 2018 offset this decline somewhat. The 5,666 reporters consisted of 2,951 banks and thrifts (hereafter, banks), of which 2,300 were small, defined as having assets of less than $1 billion; 1,605 credit unions; 76 mortgage companies affiliated with DIs (banks and credit unions); and 1,034 independent mortgage companies.[54] Banks collectively accounted for 34.2 percent of all reported mortgage originations and affiliates of banks accounted for another 2.9 percent; independent mortgage companies, 53.6 percent; and credit unions, 9.4 percent. Over the past few years, the share of loans originated by independent mortgage companies has risen sharply. In 2018, these lenders originated 57.2 percent of first-lien, owner-occupied, one-to-four-family, site-built, home-purchase loans, up slightly from 56.1 percent in 2017 and from just 35.0 percent in 2010. Independent mortgage companies also originated 56.1 percent of first-lien, owner-occupied, single-family site-built refinance loans, a slight increase from 55.8 percent in 2017.

Many institutions reported under HMDA little 2018 lending activity. About 39 percent of institutions (2,194 out of 5,666) reported fewer than 100 mortgage originations in 2018, accounting for about 107,000 total originations or less than 2 percent of all originations. By comparison, in 2017, 36.2 percent of institutions reported fewer than 100 mortgage originations, accounting for 1.4 percent of all originations. About 7 percent, or 410 of 5,666 reporting institutions, originated fewer than 25 loans, totaling just under 6,000

[54] Data on bank assets were drawn from the Federal Deposit Insurance Corporation Reports of Condition and Income. The $1 billion threshold is based on the combined assets of all banks within a given banking organization. Data available in the HMDA Reporter Panel (available at https://ffiec.cfpb.gov/data-publication/) can be used to help identify the various types of institutions. Affiliate institutions include all mortgage companies known to be wholly or partially owned by a depository—that is, institutions for which the "other lender code" in the Reporter Panel equals 1, 2, or 5. Most credit unions report HMDA data under the agency code "National Credit Union Administration," with a few large credit unions reporting under the agency code "Consumer Financial Protection Bureau."

**TABLE 10:** LENDING ACTIVITY, BY TYPE OF INSTITUTION, 2018 (PERCENT EXCEPT AS NOTED)

| | Type of institution[1] | | | | | |
|---|---|---|---|---|---|---|
| | Small bank | Large bank | Credit union | Affiliated mortgage company | Independent mortgage company | All |
| Number of institutions | 2,300 | 651 | 1,605 | 76 | 1,034 | 5,666 |
| Applications (thousands) | 650 | 2,620 | 957 | 257 | 5,830 | 10,314 |
| Originations (thousands) | 481 | 1,719 | 603 | 187 | 3,447 | 6,437 |
| Purchases (thousands) | 11 | 815 | 12 | 66 | 853 | 1,757 |
| Number of institutions with fewer than 100 loans | 1,113 | 67 | 781 | 20 | 213 | 2,194 |
| Originations (thousands) | 59.1 | 3.5 | 35.4 | 0.8 | 7.8 | 106.6 |
| Number of institutions with fewer than 25 loans | 118 | 14 | 179 | 8 | 91 | 410 |
| Originations (thousands) | 1.9 | 0.2 | 2.7 | 0.1 | 0.7 | 5.6 |
| Home-purchase loans (thousands)[2] | 222 | 922 | 255 | 138 | 2,058 | 3,596 |
| Conventional | 75.6 | 81.7 | 85.1 | 65.0 | 57.4 | 67.0 |
| Higher-priced share of conventional loans | 4.3 | 2.7 | 4.8 | 4.1 | 5.5 | 4.4 |
| LMI borrower[3] | 29.4 | 23.7 | 26.8 | 30.8 | 29.9 | 28.1 |
| LMI neighborhood[4] | 15.4 | 14.0 | 15.8 | 15.3 | 18.7 | 17.0 |
| Non-Hispanic white[5] | 76.6 | 65.0 | 66.1 | 66.4 | 58.3 | 62.0 |
| Minority borrower[5] | 13.1 | 20.3 | 17.9 | 17.7 | 25.2 | 22.4 |
| Sold[6] | 73.1 | 67.4 | 47.3 | 93.9 | 97.2 | 84.4 |
| Refinance loans (thousands)[2] | 92 | 430 | 166 | 28 | 916 | 1,631 |
| Conventional | 84.1 | 92.5 | 95.5 | 86.7 | 64.4 | 76.5 |

| | Type of institution[1] | | | | | |
|---|---|---|---|---|---|---|
| | Small bank | Large bank | Credit union | Affiliated mortgage company | Independent mortgage company | All |
| Higher-priced share of conventional loans | 4.0 | 2.1 | 3.7 | 1.3 | 2.7 | 2.7 |
| LMI borrower[3] | 26.4 | 25.8 | 28.7 | 27.1 | 32.7 | 30.0 |
| LMI neighborhood[4] | 14.4 | 14.0 | 17.9 | 13.5 | 18.3 | 16.8 |
| Non-Hispanic white[5] | 80.4 | 70.0 | 68.8 | 72.0 | 57.2 | 63.3 |
| Minority borrower[5] | 8.7 | 16.8 | 17.0 | 12.8 | 19.1 | 17.6 |
| Sold[6] | 57.9 | 62.4 | 29.0 | 93.0 | 97.4 | 79.0 |

(1) Small banks consist of those banks with assets (including the assets of all other banks in the same banking organization) of less than $1 billion at the end of 2016. Affiliated mortgage companies are nondepository mortgage companies owned by or affiliated with a banking organization or credit union.

(2) First-lien mortgages for one-to-four-family, owner-occupied, site-built homes.

(3) See table 2, note 3.

(4) See table 2, note 4.

(5) See table 2, note 1. "Minority borrower" refers to non-White (excluding joint or missing) or Hispanic White applicants.

(6) Excludes originations made in the last quarter of the year because the incidence of loan sales tends to decline for loans originated toward the end of the year, as lenders report a loan as sold only if the sale occurs within the same year as origination.

Source: FFIEC HMDA data; bank asset data drawn from Federal Deposit Insurance Corporation Reports of Condition and Income (https://www.fdic.gov).

originations.[55] These results are similar to 2017. (As noted above, these institutions were required to report only if they had originated at least 25 loans during both of the prior two years.)

Table 10 compares lending patterns of different types of institutions in 2018, and the Bureau discusses some highlights here. First, DIs tend to originate a significantly higher fraction of conventional loans than nondepository institutions. Second, independent mortgage companies originate higher shares of home-purchase loans to minority borrowers and in LMI neighborhoods than do other types of lenders. This is related to minority and LMI borrowers being more likely to obtain nonconventional loans from lenders, as discussed in section 5.1. Third, large banks originate a lower share than other types of lenders of home-purchase mortgages loans to LMI borrowers.

The HMDA data provide information on whether lenders sold originated loans within the same calendar year that they were originated, as well as the type of institution to which the lenders sold the loans, such as one of the GSEs or a banking institution (see Appendix A for a full list of purchaser types). Table 10 displays the fraction of loans lenders sold within the same calendar year, as opposed to the lenders holding them in portfolio.[56] Nondepository institutions sold in the same calendar year almost all of the loans that they originated in that year. In contrast, credit unions sold within the same calendar year 47.3 percent of the home-purchase loans they originated and 29.0 percent of the refinance loans they originated.

Tables 11a and 11b list the top 25 reporting institutions by total number of originations along with the lending characteristics listed in Table 10 for home-purchase and refinance loans, respectively.[57] With just over 364,000 originated loans, Quicken Loans continued to be the

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[55] These results include all originated dwelling-secured, closed-end loans with a home purchase, home improvement or refinance purpose for all reporters. The reporting threshold of 25 originations applies to home-purchase and refinance originations in each of the previous two years. Beginning in 2018, lending institutions were not subject to HMDA reporting requirements unless they originated at least 25 covered closed-end mortgage loans or 500 covered open-end LOCs in each of the two preceding calendar years. For a more detailed description of these and other changes to Regulation C, see Consumer Financial Protection Bureau, "New Rule Summary: Home Mortgage Disclosure (Regulation C)" (October 15, 2015), http://files.consumerfinance.gov/f/201510_cfpb_hmda-executive-summary.pdf and 82 FR 43088 (2017).

[56] Because loan sales are recorded in the HMDA data only if the loans are originated and sold in the same calendar year, loans originated toward the end of the year are less likely to be reported as sold. For that reason, statistics on loan sales are computed using only loans originated during the first three quarters of the year.

[57] Some institutions may be part of a larger organization; however, the data in Table 11 are at the reporter level. Because affiliate activity has declined markedly since the housing boom, a top 25 list at the organization level is not likely to be significantly different.

**TABLE 11a:** INSTITUTION TYPE, TOTAL ORIGINATIONS, AND TOTAL PURCHASES FOR TOP 25 RESPONDENTS IN TERMS OF TOTAL ORIGINATIONS, 2018 (HOME-PURCHASE LOANS)

| | Institution type[1] | Total originations (thousands) | Total purchases (thousands) | Home-purchase loans[2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Number (thousands) | Conventional | Higher priced[3] | LMI borrower[4] | LMI neighborhood[5] | Non-Hispanic white[6] | Minority borrower[6] | Sold[7] |
| Quicken Loans | Ind. mort. co. | 364 | 0 | 121 | 68.9 | 0.1 | 28.2 | 16.8 | 51.4 | 14.9 | 99.9 |
| Wells Fargo Bank NA | Large bank | 204 | 374 | 114 | 93.3 | 2.9 | 16.1 | 11.9 | 63.0 | 21.8 | 72.1 |
| United Shore Financial Services LLC | Ind. mort. co. | 146 | 0 | 95 | 76.6 | 2.3 | 27.9 | 18.5 | 52.7 | 27.2 | 100.0 |
| JPMorgan Chase Bank NA | Large bank | 141 | 121 | 69 | 97.5 | 0.5 | 17.0 | 12.7 | 57.3 | 29.6 | 64.6 |
| loanDepot LLC | Ind. mort. co. | 127 | 0 | 48 | 59.6 | 5.4 | 21.6 | 17.7 | 50.2 | 28.7 | 99.8 |
| Fairway Independent Mort Corp | Ind. mort. co. | 110 | 0 | 85 | 60.6 | 6.2 | 30.3 | 20.8 | 67.1 | 20.2 | 99.9 |
| Caliber Home Loans Inc. | Ind. mort. co. | 106 | 46 | 74 | 57.0 | 9.0 | 30.3 | 19.7 | 56.5 | 27.7 | 99.5 |
| Bank of America NA | Large bank | 88 | 10 | 47 | 95.7 | 0.1 | 14.5 | 11.7 | 50.2 | 30.6 | 16.0 |
| US Bank NA | Large bank | 78 | 91 | 36 | 87.7 | 1.1 | 24.6 | 14.0 | 65.4 | 17.3 | 68.9 |
| Guild Mortgage Company | Ind. mort. co. | 69 | 2 | 48 | 58.9 | 7.4 | 30.3 | 20.7 | 51.3 | 19.7 | 99.9 |
| Flagstar Bank | Large bank | 67 | 43 | 42 | 58.0 | 3.7 | 28.1 | 16.9 | 63.4 | 25.3 | 92.3 |
| Navy Federal Credit Union | Credit union | 61 | 0 | 43 | 37.8 | 25.8 | 21.6 | 14.5 | 52.1 | 27.0 | 59.3 |
| Guaranteed Rate Inc. | Ind. mort. co. | 58 | 0 | 43 | 74.3 | 2.3 | 24.8 | 16.4 | 60.9 | 17.8 | 100.0 |
| Freedom Mortgage Corporation | Ind. mort. co. | 58 | 65 | 22 | 47.6 | 2.9 | 27.4 | 19.2 | 55.7 | 31.2 | 96.2 |
| USAA Federal Savings Bank | Large bank | 56 | 0 | 44 | 33.0 | 0.6 | 16.7 | 12.7 | 64.0 | 16.0 | 99.7 |
| PrimeLending | Affiliated mort. co. | 54 | 1 | 42 | 61.4 | 6.4 | 30.2 | 16.0 | 65.2 | 18.3 | 100.0 |
| Nationstar Mortgage | Ind. mort. co. | 52 | 43 | 2 | 75.2 | 3.9 | 13.6 | 15.0 | 60.4 | 17.3 | 84.7 |
| Movement Mortgage LLC | Ind. mort. co. | 52 | 0 | 42 | 54.9 | 7.6 | 33.6 | 19.8 | 67.0 | 23.7 | 98.7 |

| | Institution type[1] | Total originations (thousands) | Total purchases (thousands) | Home-purchase loans[2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Number (thousands) | Conventional | Higher priced[3] | LMI borrower[4] | LMI neighborhood[5] | Non-Hispanic white[6] | Minority borrower[6] | Sold[7] |
| Finance of America Mortgage LLC | Ind. mort. co. | 47 | 0 | 31 | 59.9 | 4.4 | 24.3 | 21.7 | 55.9 | 24.0 | 97.4 |
| Mortgage Research Center LLC | Ind. mort. co. | 46 | 0 | 42 | 1.6 | 0.0 | 29.2 | 16.5 | 59.3 | 21.7 | 100.0 |
| Academy Mortgage Corporation | Ind. mort. co. | 41 | 0 | 29 | 57.6 | 9.5 | 32.4 | 20.0 | 66.9 | 22.8 | 99.7 |
| HomeBridge Financial Services Inc. | Ind. mort. co. | 39 | 0 | 22 | 53.3 | 5.8 | 28.1 | 19.9 | 52.4 | 32.2 | 96.5 |
| Stearns Lending | Ind. mort. co. | 38 | 15 | 25 | 50.6 | 4.8 | 26.6 | 19.8 | 57.9 | 28.9 | 99.9 |
| PNC Bank NA | Large bank | 38 | 1 | 15 | 87.0 | 0.0 | 28.6 | 14.6 | 60.2 | 16.9 | 76.1 |
| New American Funding (dba for Broker Solutions Inc) | Ind. mort. co. | 36 | 0 | 24 | 48.4 | 8.7 | 29.9 | 23.5 | 46.2 | 38.8 | 99.7 |
| Top 25 institutions | ... | 2,175 | 812 | 1,204 | 65.5 | 3.9 | 25.3 | 16.9 | 58.0 | 23.4 | 88.8 |
| **All institutions** | **...** | **6,437** | **1,757** | **3,596** | **67.0** | **4.4** | **28.1** | **17.0** | **62.0** | **22.4** | **84.4** |

... Not applicable.

(1) See table 10, note 1.
(2) First-lien mortgages for one-to-four-family, owner-occupied, site-built homes.
(3) Share of conventional loans that are higher priced.
(4) See table 2, note 3.
(5) See table 2, note 4.
(6) See table 2, note 1. "Minority borrower" refers to non-White (excluding joint or missing) or Hispanic White applicants.
(7) See table 10, note 6.

Source: FFIEC HMDA data; bank asset data drawn from Federal Deposit Insurance Corporation Reports of Condition and Income (https://www.fdic.gov).

**TABLE 11b:** INSTITUTION TYPE, TOTAL ORIGINATIONS, AND TOTAL PURCHASES FOR TOP 25 RESPONDENTS IN TERMS OF TOTAL ORIGINATIONS, 2018 (REFINANCE LOANS)

| | Institution type[1] | Total originations (thousands) | Total purchases (thousands) | Refinance loans[2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Number (thousands) | Conventional | Higher priced[3] | LMI borrower[4] | LMI neighborhood[5] | Non-Hispanic white[6] | Minority borrower[6] | Sold[7] |
| Quicken Loans | Ind. mort. co. | 364 | 0 | 220 | 72.6 | 0.0 | 32.8 | 16.9 | 43.1 | 10.9 | 99.9 |
| Wells Fargo Bank NA | Large bank | 204 | 374 | 60 | 95.2 | 2.8 | 24.8 | 15.4 | 64.3 | 21.8 | 88.0 |
| United Shore Financial Services LLC | Ind. mort. co. | 146 | 0 | 34 | 82.2 | 0.4 | 25.3 | 17.0 | 54.8 | 25.1 | 99.9 |
| JPMorgan Chase Bank NA | Large bank | 141 | 121 | 51 | 96.3 | 0.9 | 27.7 | 14.8 | 64.7 | 24.9 | 72.6 |
| loanDepot LLC | Ind. mort. co. | 127 | 0 | 67 | 51.7 | 4.5 | 36.5 | 19.1 | 60.1 | 18.3 | 99.8 |
| Fairway Independent Mort Corp | Ind. mort. co. | 110 | 0 | 10 | 80.1 | 1.8 | 27.4 | 17.0 | 70.5 | 16.6 | 99.9 |
| Caliber Home Loans Inc. | Ind. mort. co. | 106 | 46 | 19 | 69.2 | 3.8 | 26.3 | 17.3 | 61.1 | 21.5 | 99.6 |
| Bank of America NA | Large bank | 88 | 10 | 28 | 99.5 | 0.6 | 20.9 | 14.1 | 57.9 | 24.6 | 12.6 |
| US Bank, NA | Large bank | 78 | 91 | 26 | 96.5 | 2.6 | 26.6 | 16.5 | 71.3 | 15.6 | 41.9 |
| Guild Mortgage Company | Ind. mort. co. | 69 | 2 | 8 | 77.3 | 1.5 | 29.0 | 19.6 | 54.4 | 16.4 | 99.9 |
| Flagstar Bank | Large bank | 67 | 43 | 18 | 71.5 | 0.6 | 23.4 | 15.2 | 65.8 | 21.0 | 92.3 |
| Navy Federal Credit Union | Credit union | 61 | 0 | 11 | 45.3 | 7.6 | 18.7 | 15.2 | 53.0 | 29.7 | 52.4 |
| Guaranteed Rate Inc. | Ind. mort. co. | 58 | 0 | 8 | 85.7 | 0.9 | 21.2 | 13.5 | 63.4 | 12.2 | 100.0 |
| Freedom Mortgage Corporation | Ind. mort. co. | 58 | 65 | 31 | 27.6 | 1.9 | 21.7 | 19.4 | 60.1 | 27.3 | 91.6 |
| USAA Federal Savings Bank | Large bank | 56 | 0 | 9 | 45.9 | 0.1 | 17.4 | 13.9 | 65.6 | 16.3 | 99.4 |
| PrimeLending | Affiliated mort. co. | 54 | 1 | 6 | 84.8 | 2.3 | 24.5 | 14.4 | 72.4 | 15.4 | 99.9 |
| Nationstar Mortgage | Ind. mort. co. | 52 | 43 | 45 | 72.8 | 5.2 | 27.9 | 20.1 | 59.1 | 22.6 | 100.0 |

| | Institution type[1] | Total originations (thousands) | Total purchases (thousands) | Refinance loans[2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Number (thousands) | Conventional | Higher priced[3] | LMI borrower[4] | LMI neighborhood[5] | Non-Hispanic white[6] | Minority borrower[6] | Sold[7] |
| Movement Mortgage LLC | Ind. mort. co. | 52 | 0 | 3 | 78.3 | 2.9 | 27.2 | 15.9 | 72.4 | 19.2 | 99.0 |
| Finance of America Mortgage LLC | Ind. mort. co. | 47 | 0 | 8 | 80.5 | 0.9 | 22.6 | 18.6 | 57.8 | 23.6 | 95.7 |
| Mortgage Research Center LLC | Ind. mort. co. | 46 | 0 | 4 | 3.6 | 0.0 | 21.5 | 15.9 | 65.3 | 15.9 | 99.9 |
| Academy Mortgage Corporation | Ind. mort. co. | 41 | 0 | 4 | 79.9 | 0.8 | 29.4 | 17.2 | 77.0 | 14.7 | 98.8 |
| HomeBridge Financial Services Inc. | Ind. mort. co. | 39 | 0 | 11 | 36.0 | 3.2 | 15.4 | 19.2 | 51.6 | 31.4 | 92.7 |
| Stearns Lending | Ind. mort. co. | 38 | 15 | 8 | 72.9 | 1.3 | 26.7 | 20.8 | 55.7 | 30.3 | 99.9 |
| PNC Bank NA | Large bank | 38 | 1 | 14 | 96.4 | 0.0 | 31.2 | 14.6 | 71.5 | 13.2 | 49.7 |
| New American Funding (dba for Broker Solutions Inc) | Ind. mort. co. | 36 | 0 | 7 | 62.0 | 1.3 | 27.4 | 19.5 | 58.4 | 27.9 | 99.9 |
| Top 25 institutions | ... | 2,175 | 812 | 709 | 73.9 | 1.6 | 28.5 | 17.0 | 56.1 | 18.4 | 88.9 |
| **All institutions** | **...** | **6,437** | **1,757** | **1,631** | **76.5** | **2.7** | **30.0** | **16.8** | **63.3** | **17.6** | **79.0** |

... Not applicable.

(1) See table 10, note 1.

(2) First-lien mortgages for one-to-four-family, owner-occupied, site-built homes.

(3) Share of conventional loans that are higher priced.

(4) See table 2, note 3.

(5) See table 2, note 4.

(6) See table 2, note 1. "Minority borrower" refers to non-White (excluding joint or missing) or Hispanic White applicants.

(7) See table 10, note 6.

Source: FFIEC HMDA data; bank asset data drawn from Federal Deposit Insurance Corporation Reports of Condition and Income (https://www.fdic.gov).

highest volume lender.[58] Wells Fargo, United Shore Financial Services, JPMorgan Chase, and loanDepot were the next four largest lenders in terms of originations. Overall, the top 25 lenders accounted for 33.8 percent of all loan originations in 2018, largely unchanged from 2017. These same firms also provided additional funding by purchasing approximately 812,000 loans from other lending institutions during 2018 (these loans could have been originated in 2017 or in earlier years), equal to 37.3 percent of the number of loans they originated during 2018.

The top institutions differ significantly in their lending patterns. Some of this variation reflects differences between types of institutions, which were discussed earlier. For example, Table 11a shows that large banks like Bank of America have a higher share of conventional mortgages and a smaller share of lending in LMI neighborhoods compared with independent mortgage companies like Quicken Loans.

In addition to the variation across lender types, there was substantial variation in lending patterns within lender types. For example, among large banks, 97.5 percent of JPMorgan Chase's home-purchase loans were conventional, compared with 33.0 percent for USAA Federal Savings Bank.

Finally, the composition of borrowers varied across the top 25 institutions, both within and across lender types. For some institutions, more than 30 percent of home-purchase borrowers were LMI; at other institutions, this share was less than 20 percent.[59] Although it is difficult to know precisely why there was such variation, it could reflect different business strategies or different customer demands in the markets and geographic regions the institutions serve, among other possibilities.

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[58] Notably, loan counts and market shares derived from the HMDA data can differ markedly from market shares based on information compiled by Inside Mortgage Finance (https://www.insidemortgagefinance.com/). For HMDA reporting purposes, institutions report only mortgage applications for which they make the credit decision. Under HMDA, if an application was approved by a third party (such as a correspondent) rather than the lending institution, then that third party reports the loan as its own origination, and the lending institution reports the loan as a purchased loan. Alternatively, if a third party forwards an application to the lending institution for approval, then the lending institution reports the application under HMDA (and the third party does not report anything). In contrast, Inside Mortgage Finance considers loans to have been originated by the acquiring institution even if a third party makes the credit decision. Thus, many of the larger lending organizations that work with sizable networks of correspondents report considerable volumes of purchased loans in the HMDA data, while Inside Mortgage Finance considers many of these purchased loans to be originations.

[59] Note that for lenders with a significant nonconventional share of refinance loans (for example, Freedom Mortgage Corporation), borrower income may not be reported for most loans, thus pushing down the LMI share of borrowers.

# 8. Conclusion

The 2018 HMDA data is the first set of annual HMDA data that incorporates all of the changes in data required to be submitted to comply with the 2015 HMDA rule, including changes to institution and transaction reporting criteria, and changes to and extensions of the data points that institutions covered by HMDA are required to report. Even with the changes to institution and transaction reporting requirements, the 2018 HMDA data were generally similar to data from 2017. The volume of home-purchase originations, shares of nonconventional lending and lending by nondepository institutions, as well as denial rates and average loan amounts across all demographic and income groups were generally similar in 2018 and 2017. The most notable change in historical HMDA data points was a significant drop in refinance volume from 2017 to 2018, which was driven in part by increases in interest rates. The most notable change in HMDA data overall was the addition of 27 new data points. The Bureau's second HMDA Data Point article in this series focuses on these new data points.

# Appendix A: Requirements of Regulation C[60]

| Data Points | 2017 Data Fields | 2018 Data Fields | 2017 Values | 2018 Values |
|---|---|---|---|---|
| Respondent ID | | Legal Entity Identifier (LEI) | DIs<br><br>CFPB: RSSD #<br>FDIC: Certificate #<br>FRS: RSSD #<br>NCUA: Charter #<br>OCC: Charter #<br>OTS: Docket #<br><br>Non-DIs<br><br>FRS: RSSD #<br>Others: Federal Tax ID # | |
| Application Number | | Universal Loan Identifier (ULI) or Non-Universal Loan Identifier (NULI) | | |

[60] Beginning with the mortgage lending activity in 2018 that was reported to the Bureau in 2019, changes to Regulation C issued in the 2015 rule modified the information that covered institutions were required to collect and report. For a description of these changes, see Consumer Financial Protection Bureau, "New Rule Summary: Home Mortgage Disclosure (Regulation C)" (October 15, 2015), available at http://files.consumerfinance.gov/f/201510_cfpb_hmda-executive-summary.pdf.

| Data Points | 2017 Data Fields | 2018 Data Fields | 2017 Values | 2018 Values |
|---|---|---|---|---|
| Application Date | | | | |
| Loan Type | | | 1: Conventional (any loan other than FHA, VA, FSA, or RHS loans)<br>2: FHA-insured (Federal Housing Administration)<br>3: VA-guaranteed (Veterans Administration)<br>4: FSA/RHS-guaranteed (Farm Service Agency or Rural Housing Service) | Same |
| Property Type | | Construction Method and Total Units | 1: One-to-four-family dwelling (other than manufactured housing)<br>2: Manufactured housing<br>3: Multifamily dwelling | Construction Method<br>1: Site-built<br>2: Manufactured Home<br>Total Units<br>Any integer value |
| Loan Purpose | | | 1: Home purchase<br>2: Home improvement<br>3: Refinancing | 1: Home purchase<br>2: Home improvement<br>31: Refinancing<br>32: Cash-out refinancing |

| Data Points | 2017 Data Fields | 2018 Data Fields | 2017 Values | 2018 Values |
|---|---|---|---|---|
| | | | | 4: Other purpose<br>5: Not applicable |
| Occupancy | | | 1: Owner-occupied as a principal dwelling<br>2: Not owner-occupied as a principal dwelling<br>3: Not applicable | 1: Principal residence<br>2: Second residence<br>3: Investment property |
| Loan Amount | | | Rounded to thousands | Dollars |
| Preapproval Request | | | 1: Preapproval requested<br>2: Preapproval not requested<br>3: Not applicable | 1: Preapproval requested<br>2: Preapproval not requested |
| Action Taken | | | 1: Loan originated<br>2: Application approved but not accepted<br>3: Application denied<br>4: Application withdrawn<br>5: File closed for incompleteness<br>6: Loan purchased by your | 1: Loan originated<br>2: Application approved but not accepted<br>3: Application denied<br>4: Application withdrawn<br>5: File closed for incompleteness<br>6: Loan purchased by your |

| Data Points | 2017 Data Fields | 2018 Data Fields | 2017 Values | 2018 Values |
|---|---|---|---|---|
| | | | institution<br><br>7: Preapproval request denied<br><br>8: Preapproval request approved but not accepted (optional reporting) | institution<br><br>7: Preapproval request denied<br><br>8: Preapproval request approved but not accepted (mandatory reporting) |
| Action Date | | | | |
| Property Location | State, MSA, County, Census Tract | Street address, city, state, zip code, county, census tract | | |
| Ethnicity | 1 field for ethnicity of primary applicant<br><br>1 field for ethnicity of co-applicant | 5 fields for ethnicity of primary applicant and 1 free-form text field<br><br>5 fields for ethnicity of co-applicant and 1 free-form text field for co-applicant | 1: Hispanic or Latino<br><br>2: Not Hispanic or Latino<br><br>3: Information not provided by applicant in mail, internet, or telephone application<br><br>4: Not applicable<br><br>5: No co-applicant | 1: Hispanic or Latino<br><br>11: Mexican<br><br>12: Puerto Rican<br><br>13: Cuban<br><br>14: Other Hispanic or Latino<br><br>2: Not Hispanic or Latino<br><br>3: Information not provided by applicant in mail, internet, or telephone application<br><br>4: Not applicable |

| Data Points | 2017 Data Fields | 2018 Data Fields | 2017 Values | 2018 Values |
|---|---|---|---|---|
| Race | 5 fields for primary applicant and 5 fields for co-applicant | 5 fields for primary applicant and free form text fields for American Indian or Alaska Native, Asian and Native Hawaiian or Other Pacific Islander;<br><br>5 fields for co-applicant and free form free form text fields for American Indian or Alaska Native, Asian and Native Hawaiian or Other Pacific Islander | 1: American Indian or Alaska Native<br><br>2: Asian<br><br>3: Black or African American<br><br>4: Native Hawaiian or Other Pacific Islander<br><br>5: White<br><br>6: Information not provided by applicant in mail, internet, or telephone application<br><br>7: Not applicable<br><br>8: No co-applicant | 1: American Indian or Alaska Native<br><br>2: Asian<br><br>21: Asian Indian<br><br>22: Chinese<br><br>23: Filipino<br><br>24: Japanese<br><br>25: Korean<br><br>26: Vietnamese<br><br>27: Other Asian<br><br>3: Black or African American<br><br>4: Native Hawaiian or Other Pacific Islander<br><br>41: Native Hawaiian<br><br>42: Guamanian or Chamorro<br><br>43: Samoan |

| Data Points | 2017 Data Fields | 2018 Data Fields | 2017 Values | 2018 Values |
|---|---|---|---|---|
| | | | | 44: Other Pacific Islander<br><br>5.:White<br><br>6: Information not provided by applicant in mail, internet, or telephone application<br><br>7: Not applicable |
| Gender | | | 1: Male<br><br>2: Female<br><br>3: Information not provided by applicant in mail, internet, or telephone application<br><br>4: Not applicable<br><br>5: No co-applicant or co-borrower | 1: Male<br><br>2: Female<br><br>3: Information not provided by applicant in mail, internet, or telephone application<br><br>4: Not applicable<br><br>5: No co-applicant<br><br>6: Applicant selected both male and female |

# Appendix B: New Reporting Requirements of Regulation C

| New Data Points Required by DFA | New Data Points Required Under the Bureau's Discretionary Authority |
|---|---|
| Universal Loan Identifier (ULI) | Mandatorily-Reported Reasons for Denial |
| Property Address | Origination Charges |
| Rate Spread for all loans | Discount Points |
| Credit Score | Lender Credits |
| Total Loan Costs or Total Points and Fees | Interest Rate |
| Prepayment Penalty Term | Debt-to-Income Ratio |
| Loan Term | Combined Loan-to-Value Ratio |
| Introductory Rate Period | Manufactured Home Secured Property Type |
| Non-Amortizing Features | Manufactured Home Land Property Interest |
| Property Value | Multifamily Affordable Units |
| Application Channel | Automated Underwriting System |
| Mortgage Loan Originator Identifier | Reverse Mortgage Flag |
| Age | Open-End LOC Flag |
| | Business or Commercial Purpose Flag |