Federal Reserve BULLETIN

Board of Governors of the Federal Reserve System

www.federalreserve.gov

November 2015 Vol. 101, No. 4



The 2014 Home Mortgage Disclosure Act Data

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This article provides an overview of residential mortgage lending in 2014 and discusses a number of changes in mortgage market activity over time based on data reported under the Home Mortgage Disclosure Act of 1975 (HMDA). HMDA requires most mortgage lending institutions with offices in metropolitan areas to disclose to the public detailed information about their home-lending activity each year. The HMDA data include the disposition of each application for mortgage credit; the type, purpose, and characteristics of each home mortgage that lenders originate or purchase during the calendar year; the census-tract designations of the properties related to those loans; loan pricing information; personal demographic and other information about loan applicants, including their race or ethnicity and income; and information about loan sales (see appendix A for a full list of items reported under HMDA).¹

HMDA was enacted to help members of the public determine whether financial institutions are serving the housing needs of their local communities and treating borrowers and loan applicants fairly, provide information that could facilitate the efforts of public entities to distribute funds to local communities for the purpose of attracting private investment, and help households decide where they may want to deposit their savings.² The data have proven to be valuable for research and are often used in public policy deliberations related to the mortgage market.³

Mortgage debt is by far the largest component of household debt in the United States, and mortgage transactions can have important implications for households' financial wellbeing. The HMDA data are the most comprehensive source of publicly available information on the U.S. mortgage market, providing unique details on how much mortgage credit gets extended each year, who obtains such credit, and which institutions provide such credit.

¹ The 2014 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 metropolitan statistical areas (MSAs) published by the Office of Management and Budget. The first year for which the HMDA data use 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, www.ffiec.gov/hmda/OMB_MSA .htm.

² A brief history of HMDA is available at Federal Financial Institutions Examination Council, "History of HMDA," webpage, www.ffiec.gov/hmda/history2.htm.

³ 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 Financial Institutions Examination Council (FFIEC; www.ffiec.gov/hmda/history2.htm) continues to be responsible for collecting the HMDA data from reporting institutions and facilitating public access to the information. In September of each year, the FFIEC releases to the public summary disclosure tables pertaining to lending activity from the previous calendar year for each reporting lender as well as aggregations of home-lending activity for each metropolitan statistical area and for the nation as a whole. The FFIEC also makes available to the public a data file containing virtually all of the reported information for each lending institution as well as a file that includes key demographic and housing-related data for each census tract drawn from census sources.

In 2014, house prices continued their upward trend evident since 2012, and mortgage interest rates declined throughout the year, although rates remained slightly higher than the historical lows reached in late 2012 and early 2013. While mortgage credit stayed generally tight, conditions appeared to ease somewhat over the course of the year as the fraction of mortgage lending to lower-credit borrowers increased, and reports from the Senior Loan Officer Opinion Survey on Bank Lending Practices indicate that several large banks relaxed their credit requirements for prime loans. However, growth in new housing construction was slow throughout the year, suggesting some persistent softness in new housing demand.⁴

Significant regulatory changes occurred in 2014 that may have influenced lending patterns. In January 2014, the new ability-to-repay (ATR) and qualified mortgage (QM) rules, issued by the Consumer Financial Protection Bureau (CFPB), went into effect. As discussed in more detail in a later section, the new rules generally require lenders originating closed-end loans to make a reasonable, good faith determination of whether mortgage borrowers will be able to repay their loans. This ATR determination includes consideration and verification of mortgage applicants' incomes, other debts, and credit histories. The rules also define categories of QM loans that are presumed to meet the ATR requirement and receive certain protections from liability. The QM requirements generally include a limit on the borrower's ratio of total debt service payments to income (DTI), limits on points and fees, and various other restrictions on loan terms and features.⁵

Also in January 2014, revised rules implementing the Home Ownership and Equity Protection Act (HOEPA), which provides special consumer protections (such as additional disclosures) for borrowers considering certain mortgage loans that are priced well above prime rates, went into effect. Most notably, the new rules extend HOEPA coverage from refinance and home equity loans to also include home-purchase loans and home equity lines of credit, as well as adding new borrower protections, including a requirement that consumers receive homeownership counseling before obtaining a high-cost mortgage.⁶

This article presents findings from the HMDA data describing mortgage market activity and lending patterns over time, including the incidence of higher-priced or nonprime lending and rates of denial on mortgage applications, across different demographic groups and lender types.⁷ Some of the key findings are as follows:

- The number of mortgage originations in 2014 declined 31 percent, to 6.0 million from 8.7 million in 2013. This decrease was due to a drop in refinance mortgages for one- to four-family properties, which fell by over 2.8 million, or 55 percent, from 2013, as mortgage interest rates in 2014 remained above the low levels experienced in early 2013. In contrast to refinancing, one- to four-family home-purchase originations increased by 123,000, or 4 percent, from 2013, continuing an upward trend since 2011.
- 2. The nonconventional share of first-lien home-purchase loans for one- to four-family, owner-occupied, site-built properties (that is, loans with mortgage insurance from the

⁴ For more information on credit and economic conditions during 2014, see Board of Governors of the Federal Reserve System (2015), *Monetary Policy Report* (Washington: Board of Governors, February 24), www .federalreserve.gov/monetarypolicy/mpr_default.htm.

⁵ For more information, see Consumer Financial Protection Bureau, "Ability to Repay and Qualified Mortgage Standards under the Truth in Lending Act (Regulation Z)," webpage, www.consumerfinance.gov/regulations/ ability-to-repay-and-qualified-mortgage-standards-under-the-truth-in-lending-act-regulation-z.

⁶ For more information, see Consumer Financial Protection Bureau (2014), 2013 Home Ownership and Equity Protection Act (HOEPA) Rule: Small Entity Compliance Guide (Washington: CFPB, January 9), http://files .consumerfinance.gov/f/201401_cfpb_hoepa-compliance-guide.pdf.

⁷ Some lenders file amended HMDA reports, which are not reflected in the initial public data release. A final HMDA data set reflecting these changes is created two years following the initial data release. The data used to prepare this article are drawn from the initial public release for 2013–14 and from the final HMDA data set for years prior to that. Consequently, numbers in this article for the years 2012 and earlier may differ somewhat from numbers calculated from the initial public release files.

Federal Housing Administration (FHA) or guarantees from the Department of Veterans Affairs (VA), the Farm Service Agency (FSA), or the Rural Housing Service (RHS)) stood at about 36 percent in 2014, down from 38 percent in 2013 and from a peak of 54 percent in 2009. The decline since 2009 reflects a decrease in the FHA share of loans, possibly due to a series of increases, starting in 2010, in the mortgage insurance premium (MIP) that the FHA charges borrowers.

- 3. Black and Hispanic white borrowers increased their share of home-purchase loans for one- to four-family, owner-occupied, site-built properties in 2014. The HMDA data indicate that 5.2 percent of such loans went to black borrowers, up from 4.8 percent in 2013, while 7.9 percent went to Hispanic white borrowers, up from 7.3 percent in 2013, reversing a declining trend for both groups. The share of home-purchase loans to highincome borrowers increased to 46.1 percent from 44.8 percent in 2013.
- 4. The HMDA data provide little indication that the new ATR and QM rules significantly curtailed mortgage credit availability in 2014 relative to 2013. For example, despite the QM rule that caps borrowers' DTI ratio for many loans, the fraction of high-DTI loans does not appear to have declined in 2014 from 2013. However, as discussed in more detail later, there are significant challenges in determining the extent to which the new rules have influenced the mortgage market, and the results here do not necessarily rule out significant effects or the possibility that effects may arise in the future.
- 5. The HMDA loan pricing data indicate that, in 2014, lending activity dropped sharply at the pricing thresholds where HOEPA protections kick in. As discussed later, there are several potential interpretations and implications of this finding.
- 6. In 2014, only about 3 percent of conventional home-purchase loans and 2 percent of conventional refinance loans were higher priced. However, small banks and credit unions were much more likely to originate conventional higher-priced loans than large banks and mortgage companies and thus accounted for a highly disproportionate share of conventional higher-priced loans in 2014. For example, while small banks and credit unions originated about 18 percent of conventional home-purchase loans, they accounted for about 59 percent of higher-priced conventional home-purchase loans.
- 7. The share of mortgages originated by nondepository, independent mortgage companies has increased sharply in recent years. In 2014, this group of lenders accounted for 47 percent of first-lien owner-occupant home-purchase loans and 42 percent of such refinance loans, higher levels than at any point since at least 1995. This recent rise has been widespread, occurring across a range of demographic groups and for both conventional and nonconventional lending. Small banks and credit unions have also increased their market shares over the past decade, while the fraction of originations attributable to large banks and their nonbank subsidiaries has diminished significantly.
- 8. Due to this shifting landscape, a historically high share of loans is now originated outside the federally insured banking system by institutions—independent mortgage companies and credit unions—that are not subject to the Community Reinvestment Act (CRA). In addition, small banks have steadily increased the fraction of their lending done outside of their CRA assessment areas. However, assessment-area lending by large banks has held steady in recent years at levels well above those reached during the housing boom.

Mortgage Applications and Originations

In 2014, 7,062 institutions reported data on nearly 10 million home mortgage applications (including about 1.5 million applications that were closed by the lender for incompleteness or were withdrawn by the applicant before a decision was made) that resulted in about 6 million originations. The number of originations in 2014 was down from 8.7 million originations in 2013 (table 1).

Table 1. Applications and			004–14								
Numbers of loans, in thousands, o	except as	noted									
Characteristic of loan and of property	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1–4 Family											
Home purchase											
Applications	9,804	11,685	10,929	7,609	5,060	4,217	3,848	3,650	4,023	4,554	4,662
Originations	6,437	7,391	6,740	4,663	3,139	2,793	2,547	2,430	2,742	3,112	3,235
First lien, owner occupied	4,789	4,964	4,429	3,454	2,628	2,455	2,218	2,073	2,343	2,680	2,804
Site-built, conventional	4,107	4,425	3,912	2,937	1,581	1,089	1,005	999	1,251	1,622	1,736
Site-built, nonconventional	553	411	386	394	951	1,302	1,151	1,019	1,033	993	1,001
FHA share (percent)	74.6	68.6			78.9	77.0	77.4	70.9	68.0	62.7	58.3
VA share (percent)	21.6	26.7		27.1	15.2	13.9	15.2	18.2	19.9	24.3	28.4
FSA/RHS share (percent)	3.9	4.7			5.9	9.0	7.4	10.9	12.0	13.0	13.3
Manufactured, conventional	106	100	101	95	68	43	44	40	44	51	51
Manufactured, nonconventional	24	27	30	29	28	21	17	15	14	14	16
First lien, non-owner occupied	857	1,053	880	607	412	292	285	314	355	385	377
Junior lien, owner occupied	738	1,224	1,269	552	93	44	42	41	43	45	53
Junior lien, non-owner occupied	53	150	162	50	6	2	2	1	1	1	2
Refinance	00	100	102	50	0	2	2				2
Applications	16,085	15,907	14,046	11,566	7,805	9,983	8,433	7.422	10,526	8,549	4.386
Originations	7,591	7.107	6,091	4,818	3,491	5,772	4,969	4,330	6,668	5,131	2,301
First lien, owner occupied	6,497	5,770	4,469	3.659	2,934	5,301	4,516	3,856	5,930	4,385	1,950
Site-built, conventional	6,115	5,541	4,287	3,407	2,363	4,264	3,835	3,315	4,971	3,628	1,561
Site-built, nonconventional	297	151	110	180	506	979	646	508	917	713	360
FHA share (percent)	68.3	77.3			92.2	83.7	79.3	63.2	61.2	61.1	47.3
VA share (percent)	31.4	22.4			7.6	15.9	20.3	35.9	37.8	37.7	52.2
FSA/RHS share (percent)	.2	.3	.2	.1	.2	.4	.4	.9	.9	1.2	0.5
Manufactured, conventional	77	70	60	56	42	36	25	25	31	32	20
Manufactured,											
nonconventional	7	8	12	16	22	22	10	9	11	12	8
First lien, non-owner occupied	618	582	547	474	330	350	359	394	660	671	292
Junior lien, owner occupied	464	729	1,036	661	219	115	88	74	73	70	55
Junior lien, non-owner occupied	13	25	39	23	9	7	6	5	5	5	4
Home improvement											
Applications	2,200	2,544	2,481	2,218	1,413	832	670	675	779	833	840
Originations	964	1,096	1,140	958	573	390	341	335	382	425	408
Multifamily ¹											
Applications	61	58	52	54	43	26	26	35	47	51	45
Originations	48	45	40	41	31	19	19	27	37	40	35
Total applications	28,151	30,193					12,977		15,375	13,987	9,933
Total originations	15,040	15,638	14,011	10,480	7,234	8,974	7,876	7,122	9,828	8,707	5,980
Memo											
Purchased loans	5,142	5,868	6,236	4,821	2,935	4,301	3,229	2,939	3,163	2,794	1,752
Requests for preapproval ²	1,068	1,260	1,175	1,065	735	559	445	429	474	516	501
Requests for preapproval that were approved but not acted on	167	166	189	197	99	61	53	55	64	72	64
Requests for preapproval that were denied	171	231	222	235	177	155	117	130	149	163	126

Note: Components may not sum to totals because of rounding. Applications include those withdrawn and those closed for incompleteness. FHA

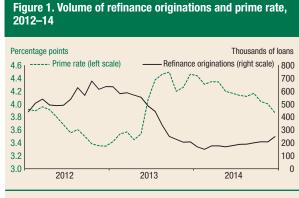
is Federal Housing Administration; VA is U.S. Department of Veterans Affairs; FSA is Farm Service Agency; RHS is Rural Housing Service.

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.

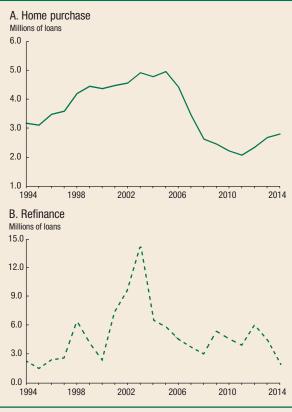
Source: Here and in subsequent tables and figures, except as noted, Federal Financial Institutions Examination Council, data reported under the Home Mortgage Disclosure Act (www.ffiec.gov/hmda).

Refinance mortgages for one- to four-family properties dropped by over 2.8 million, or 55 percent, from 2013 to 2014, as mortgage interest rates remained above the historic lows reached in the early months of 2013 (figure 1). While the number of refinancings fell for the second consecutive year, one- to four-family home-purchase originations grew by almost 123,000, or 4 percent, from 2013. Most one- to four-family homepurchase loans are first liens for owner-occupied properties. In the



Note: The data are monthly. Loans are first-lien mortgages excluding those for multifamily housing. The prime rate is the average interest rate on 30-year fixedrate mortgages being offered to high-quality prime borrowers reported by Freddie Mac in its Primary Mortgage Market Survey.

Figure 2. Number of home-purchase and refinance mortgage originations reported under the Home Mortgage Disclosure Act, 1994–2014



Note: The data are annual. Mortgage originations for one- to four-family owneroccupied properties, with junior-lien loans excluded in 2004 and later. past three years, such loans have grown over 35 percent, from nearly 2.1 million in 2011 to over 2.8 million in 2014. However, the volume of such home-purchase originations has not yet climbed back to the levels observed from 1994 to 2007 (figure 2).⁸ The number of first-lien home-purchase loans for non-owner-occupied properties that is, purchases of rental properties, vacation properties, and second homes—decreased slightly in 2014, from 385,000 in 2013 to 377,000 in 2014.

The annual home-purchase loan volumes presented in figure 2 give the impression that the upward trend that began in 2011 slowed in 2014. This impression is mostly an artifact of a decline in lending in the second half of 2013. Figure 3 plots the monthly volume of first-lien home-purchase loans starting in 2011, with and without seasonal

⁸ The HMDA data prior to 2004 did not provide lien status for loans, and thus the number of loans prior to 2004 includes both first- and junior-lien loans. That said, including junior-lien home-purchase loans in 2014 does not change the conclusion that home-purchase lending in 2014 was below that in 1994. It should also be noted that, because HMDA coverage has expanded over time, in part as a result of significantly more counties being included in metropolitan statistical areas now than in the early 1990s, the lower loan volume in 2014 relative to 1994 is understated.



adjustment.⁹ The figure shows that, in fact, the seasonally adjusted growth rate of home-purchase originations during the course of 2014 was fairly similar to that seen from 2011 through the first half of 2013.

In table 1, the volume of first-lien lending for owner-occupied properties is further disaggregated by loan and property type. (A larger, supplementary version of table 1, with the data broken down by month, is available in the Excel file posted with this article, as are all of the other tables referenced in the article.) In addition to lien and

occupancy status, the HMDA data provide details on the type of property securing the loan (site-built or manufactured home) and on the type of loan (conventional or not).¹⁰ As noted earlier, nonconventional lending involves loans with mortgage insurance or guarantees from federal government agencies, including the FHA, the VA, the RHS, and the FSA. Conventional lending encompasses all other loans, including those sold to the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac.

Nonconventional loans are more common for home purchases than refinancings and usually involve high loan-to-value (LTV) ratios—that is, the borrowers provide relatively small down payments. For site-built properties, nonconventional home-purchase loans increased less than 1 percent in 2014, while conventional loans increased about 7 percent. The nonconventional share of first-lien home-purchase loans for one- to four-family, owner-occupied, site-built properties stood at about 36 percent in 2014, down slightly from 38 percent in 2013 and down significantly from its peak of 54 percent in 2009 in the wake of the financial crisis.¹¹ That said, last year, the nonconventional share remained above historical averages (figure 4).

Figure 4 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 held steady over this period. One factor that may help explain the reduction in the FHA share is a series of increases in the annual MIP that the FHA charges to borrowers. Between Octo-

⁹ The data series was adjusted for seasonality using the Census Bureau's X-12 package. For a description of X-12 and seasonal adjustment in general, see the Census Bureau's "FAQs on Seasonal Adjustment" at www.census .gov/const/www/faq2.html. The date used to compile data at the monthly level is the "action date," which is the date on which the lending institution took action on an application. For approved applications, this date is usually the closing date or origination date of the loan. The action date is not released in the public HMDA data files.

¹⁰ Manufactured-home lending differs from lending on site-built homes, in part because most of the homes are sold without land and are treated 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 table 8). This article focuses almost entirely on site-built mortgage originations, which constitute the vast majority of originations (as shown in table 1). That said, it is important to keep in mind that, because manufactured homes typically are less expensive than site-built homes, they provide a low-cost housing option for households with more moderate incomes.

¹¹ For a more detailed discussion of the post-crisis rise in nonconventional lending, see Robert B. Avery, Neil Bhutta, Kenneth P. Brevoort, and Glenn B. Canner (2010), "The 2009 HMDA Data: The Mortgage Market in a Time of Low Interest Rates and Economic Distress," *Federal Reserve Bulletin*, vol. 96 (December), pp. A39– A77, www.federalreserve.gov/pubs/bulletin/2010/default.htm.

ber 2010 and April 2013, the annual MIP for a typical homepurchase loan more than doubled. from 0.55 percent of the loan amount to 1.35 percent.¹² Also in 2013, the FHA extended the period over which the annual MIP is required to be paid. For a typical home-purchase loan, the annual premium must now be paid over the life of the loan rather than until the LTV ratio falls below 78 percent. Although this extension has no effect on the initial cost of the mortgage, it would change the potential longer-term cost if borrowers continued to hold the mortgage after the LTV ratio fell below 78 percent.¹³

The remainder of table 1 provides additional details on the breakdown of one- to four-family home-

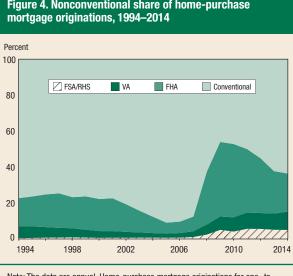


Figure 4. Nonconventional share of home-purchase

Note: The data are annual. Home-purchase mortgage originations for one- to four-family owner-occupied properties, with junior-lien loans excluded in 2004 and later. Nonconventional loans are those insured by the Federal Housing Administration (FHA) or backed by guarantees from the U.S. Department of Veterans Affairs (VA), the Farm Service Agency (FSA), or the Rural Housing Service (RHS).

purchase and refinance loans by lien and occupancy status and by property and loan type.¹⁴ Table 1 also provides the number of applications for and originations of home-improvement loans for one- to four-family properties, many of which are junior liens or unsecured, and loans for the purchase of multifamily properties (consisting of five or more units). Finally, the HMDA data include details about preapproval requests for home-purchase loans and loans purchased by reporting institutions during the reporting year, although the purchased loans may have been originated at any point in time. Lenders also reported roughly 501,000 preapproval requests; roughly 62 percent of these requests turned into an actual loan application for a specific property in 2014.¹⁵ Table 1 also shows that, for 2014, lenders purchased 1.8 million loans from other institutions.

¹² Changes to the FHA's upfront and annual MIPs over time have been documented in Urban Institute, Housing Finance Policy Center (2014), Housing Finance at a Glance: A Monthly Chartbook (Washington: Urban Institute, March), www.urban.org/publications/413061.html. A typical FHA home-purchase loan has an LTV of over 95 percent and a loan term in excess of 15 years. The upfront premium, on net, was unchanged between 2010 and 2013; it was briefly increased from 1.75 percent to 2.25 percent and lowered back to 1.00 percent in 2010, and then it was raised back to 1.75 percent in 2012.

¹³ For 2015, the FHA reduced the annual premium by 50 basis points on new forward mortgages beginning on January 26. See U.S. Department of Housing and Urban Development (2015), "Reduction of Federal Housing Administration (FHA) Annual Mortgage Insurance Premium (MIP) Rates and Temporary Case Cancellation Authority," Mortgagee Letter 2015-01 (January 9), https://portal.hud.gov/hudportal/documents/huddoc?id=15-01ml.pdf.

¹⁴ Note that under the regulations that govern HMDA reporting, many standalone junior-lien loans are not reported because either the lender does not know the purpose of the loan or the reasons cited for the loan are not ones that trigger a reporting requirement. Unless a junior lien is used for home purchase or explicitly for home improvements, or to refinance an existing lien, it is not reported under HMDA. Further, home equity lines of credit, many of which are junior liens and could also be used to help purchase a home, do not have to be reported in the HMDA data regardless of the purpose of the loan.

¹⁵ Reporters can, but are not required to, report preapproval requests that they approve but are not acted on by the potential borrower.

Mortgage Outcomes by Income and by Race and Ethnicity

A key attribute of the HMDA data is that they help policymakers and the broader public better understand the distribution of mortgage credit across different demographic groups. The next set of tables provides information on loan shares, product usage, denial rates and reasons, and mortgage pricing for population groups defined by applicant income, neighborhood income, and applicant race and ethnicity (tables 2–8). With the exception of table 8, which includes loans for manufactured homes, these tables focus on first-lien home-purchase and refinance loans for one- to four-family, owner-occupied, site-built properties. As can be seen from table 1, such loans accounted for about 78 percent of all HMDA originations in 2014.

The Distribution of Home Loans across Demographic Groups

Table 2 shows different groups' shares of home-purchase and refinance loans and how these shares have changed over time. For example, black borrowers' share of home-purchase loans (conventional and nonconventional loans combined) was 5.2 percent in 2014, up from 4.8 percent in 2013 but still lower than its peak of 8.7 percent in 2006. Similarly, the Hispanic white share of home-purchase loans was 7.9 percent in 2014, up from 7.3 percent in 2013, although well below the 11.7 percent share seen in 2006. Shares of refinance loans to minorities other than Asians have generally increased since 2010. The bottom of the table 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.¹⁶

In terms of borrower income, the share of home-purchase loans to low- or moderateincome (LMI) borrowers declined, from 28.4 percent in 2013 to 27.0 percent in 2014.¹⁷ Following definitions used by the federal bank supervisory agencies in enforcement of the CRA, LMI borrowers are defined as those with incomes of less than 80 percent of estimated current area median family income (AMFI); AMFI is calculated based on the incomes of residents of the metropolitan area or nonmetropolitan portion of the state in which the loan-securing property is located.¹⁸ For 2014, the Office of Management and Budget published new metropolitan area delineations, so caution should be exercised in comparing relative income measures between 2013 and 2014.¹⁹

From 2013 to 2014, the home-purchase loan share directed to high-income neighborhoods (defined as census tracts) decreased from 43.2 percent to 41.8 percent.²⁰ LMI and middleincome tracts both saw small gains. In addition to the difficulties in comparison induced by the changing metropolitan area definitions, it is important to note that shares by neighborhood income in 2012 and thereafter are not perfectly comparable with those in 2011 and earlier because census-tract definitions and census-tract median family income estimates were revised in 2012. The current tract demographic measures are based on 2010

¹⁶ For example, the number of home-purchase loans to Asians in 2014 was about 148,000, derived by multiplying 2.737 million loans by 5.4 and then dividing by 100.

¹⁷ Note that the sum of refinance shares across borrower-income groups is significantly less than 100 percent because income is not always relied on in underwriting decisions, particularly in recent years, which appears to reflect increased usage of nonconventional streamline refinance programs. Indeed, in 2014, about 75 percent of refinance loans for which borrower income was not reported were nonconventional.

¹⁸ 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.

¹⁹ A similar redefinition of metropolitan areas affects comparisons between the 2003 and 2004 HMDA data.

²⁰ Definitions for LMI, middle-income, and high-income neighborhoods are identical to those for LMI, middleincome, and high-income borrowers but are based on the ratio of census-tract median family income to AMFI measured from the 2006–10 American Community Survey data.

Table 2. Distribution of home loa Percent except as noted	ns, by	purpos	e of lo	an, 200	4–14						
Characteristic of borrower and of neighborhood	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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
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
Hispanic white	7.6	10.5	11.7	9.0	7.9	8.0	8.1	8.3	7.7	7.3	7.9
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
Other minority ²	1.4	1.3	1.1	1.0	.9	.9	.9	.8	.8	.7	.8
Joint	2.3	2.3	2.3	2.5	2.8	2.8	2.7	2.8	2.9	3.1	3.3
Missing	19.8	11.5	10.5	10.1	9.6	9.3	9.1	8.6	8.2	8.2	8.3
AII	100	100	100	100	100	100	100	100	100	100	100
Borrower income ³											
Low or moderate	27.7	24.6	23.6	24.7	28.1	36.7	35.5	34.4	33.3	28.4	27.0
Middle	26.9	25.7	24.7	25.2	27.1	26.7	25.6	25.2	25.2	25.2	25.6
High	41.4	45.5	46.7	47.0	43.1	34.7	37.4	38.8	40.0	44.8	46.1
Income not used or not applicable	4.0	4.2	5.0	3.1	1.7	1.9	1.5	1.6	1.5	1.6	1.3
All	100	100	100	100	100	100	100	100	100	100	100
Neighborhood income ⁴											
Low or moderate	14.5	15.1	15.7	14.4	13.1	12.6	12.1	11.0	12.8	12.7	13.3
Middle	48.7	49.2	49.5	49.6	49.8	50.2	49.4	49.4	43.6	43.7	44.6
High	35.8	34.7	33.7	35.1	35.9	35.8	37.7	39.1	43.2	43.2	41.8
All	100	100	100	100	100	100	100	100	100	100	100
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	4.4
Black or African American	7.4	8.3	9.6	8.4	6.0	3.5	2.9	3.1	3.3	4.4	5.3
Hispanic white	6.2	8.6	10.1	8.7	5.3	3.2	3.0	3.3	3.9	5.0	6.2
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
Other minority ²	1.4	1.4	1.3	1.1	.8	.6	.5	.6	.6	.7	.9
Joint	2.1	2.1	1.9	2.0	2.2	2.6	2.7	2.8	3.1	3.1	3.3
Missing	22.1	15.7	14.6	14.1	11.9	11.4	11.4	11.3	11.1	11.6	12.2
All	100	100	100	100	100	100	100	100	100	100	100
Borrower income ³											
Low or moderate	26.2	25.5	24.7	23.3	23.5	19.6	19.0	19.2	19.6	21.1	22.2
Middle	26.3	26.8	26.1	25.6	25.5	22.5	22.5	21.3	21.8	21.7	22.2
High	38.8	40.8	43.7	46.1	44.8	45.8	49.6	48.1	47.7	46.3	45.6
Income not used or not applicable	8.7	6.9	5.5	5.0	6.2	12.1	8.9	11.4	10.9	10.9	10.0
All	100	100	100	100	100	100	100	100	100	100	100
Neighborhood income ⁴											
Low or moderate	15.3	16.5	17.9	16.1	11.9	7.7	7.2	7.4	10.1	12.1	13.1
Middle	50.0	51.3	52.0	52.2	51.9	47.5	46.1	46.1	41.9	43.8	45.2
High	33.9	31.6	29.4	31.0	35.2	43.5	46.0	46.0	47.6	43.9	41.4
All	100	100	100	100	100	100	100	100	100	100	100
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	2,615	2,737
Number of refinance loans (thousands)	6,412	5,692	4,397	3,588	2,869	5,243	4,481	3,823	5,888	4,341	1,921
number of remance loans (mousands)	0,412	5,692	4,397	3,388	2,009	5,243	4,401	3,023	5,000	4,341	1,921

Note: First-lien mortgages for one- to four-family 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 two races and one is white, that applicant is categorized under the minority race. Otherwise, the applicat 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 and 2013 and from the 2000 census for 2004–11, and the three categories have the same cutoffs as the borrower-income groups (see note 3).

census data and 2006–10 American Community Survey data, whereas the 2004–11 data relied on 2000 census income and population data.²¹

One way to examine how lending to LMI borrowers and neighborhoods changed between 2013 and 2014 in the absence of changes to metropolitan statistical area (MSA) definitions is to focus exclusively on lending in MSAs whose boundaries remained the same across the two years. There are 282 such MSAs, and they accounted for about half of all HMDA-reported mortgage originations in 2013 and 2014 combined. In these MSAs, changes in the share of loans to different income groups largely mirror the nationwide patterns shown in table 2 (numbers for the 282 MSAs not shown in tables).

Table 3 shows the average dollar value of home-purchase and refinance loans by different groups and how these averages have changed over time. All dollar amounts are reported in nominal terms. Overall, home-purchase dollar values follow the historical trend of home prices, rising during the mid-2000s, falling sharply through 2008 and 2009, then beginning to recover in the past few years. The trends differ substantially by race and ethnicity, how-ever. The average home-purchase loan to a Hispanic white borrower in 2014 was for \$198,000, up from \$190,000 in 2013 but well below the peak of \$238,000 in 2006. In contrast, the average home-purchase loan amount for a non-Hispanic white borrower was about \$231,000 in 2014, higher than the pre-crisis peak in 2007 of about \$222,000. Asian borrowers took out the largest loans, averaging \$344,000 for home purchases and \$343,000 for refinancings in 2014, whereas loans to black borrowers averaged \$199,000 for home purchases and \$175,000 for refinancings.²²

In terms of borrower income, for LMI borrowers, the average home-purchase loan edged down from \$133,000 in 2013 to \$132,000 in 2014; it also edged down for middle-income borrowers. High-income borrowers saw their average home-purchase loan value rise to \$328,000 in 2014 from \$323,000 in 2013. The average refinance loan value declined for LMI borrowers but rose for middle- and high-income borrowers, while the average loan value for both home-purchase and refinance loans rose in LMI, middle-income, and high-income neighborhoods. Refinance loans in high-income neighborhoods increased the most in average value, to \$293,000 in 2014 from \$270,000 in 2013.

Variation across Demographic Groups in Nonconventional Loan Use

Table 4 shows that black and Hispanic white borrowers are much more likely to use nonconventional loans (FHA, VA, RHS, and FSA loans) than conventional loans compared with other racial and ethnic groups. In 2014, 68 percent of black home-purchase borrowers and 60 percent of Hispanic white home-purchase borrowers took out a nonconventional loan, compared with about 33 percent of non-Hispanic white home-purchase borrowers and just 15 percent of Asian home-purchase borrowers. These numbers have declined from their peaks in 2009 and 2010, when over three-fourths of black and Hispanic white homepurchase borrowers, and over one-half of non-Hispanic white home-purchase borrowers, took out nonconventional loans.

Nonconventional usage is also more prevalent for borrowers with lower incomes and in neighborhoods with lower incomes. In 2014, about one-half of LMI home-purchase borrowers and 48 percent of those borrowing to purchase homes in LMI neighborhoods used

²¹ For more information on the transition to the new census-tract data, see Robert B. Avery, Neil Bhutta, Kenneth P. Brevoort, and Glenn B. Canner (2012), "The Mortgage Market in 2011: Highlights from the Data Reported under the Home Mortgage Disclosure Act," *Federal Reserve Bulletin*, vol. 98 (December), pp. 1–46, www .federalreserve.gov/pubs/bulletin/2012/default.htm.

²² Median loan amounts (not shown in tables) followed similar trends as average loan amounts.

Table 3. Average value of home Thousands of dollars, nominal	e loans, t	oy purp	ose of	loan, 2	004–14	1					
Characteristic of borrower and of neighborhood	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
A. Home purchase											
Borrower race and ethnicity ¹											
Asian	280	316	326	334	299	276	293	291	304	328	344
Black or African American	166	183	197	197	184	172	174	174	179	193	199
Hispanic white	189	224	238	220	186	168	168	168	176	190	198
Non-Hispanic white	193	211	216	222	209	195	204	204	213	226	23
Other minority ²	206	240	257	245	216	196	201	198	206	219	229
Joint	233	255	261	269	255	248	263	261	274	289	293
Missing	216	248	261	280	265	242	256	262	279	298	293
Borrower income ³											
Low or moderate	114	116	117	123	128	129	128	125	131	133	13
Middle	165	170	170	176	182	187	189	184	192	194	19
High	281	306	313	317	297	291	303	302	313	323	32
Income not used or not applicable	208	235	254	266	218	195	214	225	233	262	27
Neighborhood income ⁴											
Low or moderate	159	180	189	188	175	160	164	163	158	171	17
Middle	172	190	197	196	186	174	177	173	178	191	19
High	258	284	294	301	277	257	270	271	282	300	30
Memo: All home-purchase loans	201	221	228	232	217	202	210	210	221	235	240
B. Refinance											
Borrower race and ethnicity ¹											
Asian	274	325	370	368	321	298	313	309	308	304	34
Black or African American	151	180	199	192	173	184	180	174	181	171	17
Hispanic white	178	219	252	244	193	190	191	183	190	180	19
Non-Hispanic white	180	205	221	222	205	209	210	208	212	205	21
Other minority ²	190	229	269	258	211	217	218	207	213	201	21
Joint	210	246	265	262	243	247	254	249	254	248	26
Missing	194	226	246	250	242	243	248	253	253	244	24
Borrower income ³											
Low or moderate	114	124	124	126	129	138	133	128	135	128	12
Middle	162	181	183	181	180	185	179	174	182	171	17
High	256	294	320	311	275	268	274	280	277	276	30
Income not used or not applicable	150	178	240	240	194	204	203	185	212	192	20
Neighborhood income ⁴											_0
Low or moderate	142	169	188	185	164	172	172	167	163	153	15
Middle	158	184	201	198	182	184	182	175	181	173	18
High	245	282	313	311	272	259	265	269	269	270	29
Memo: All refinance loans	185	212	232	231	212	216	220	218	221	213	224

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.

nonconventional loans, compared with 24 percent of high-income borrowers and 26 percent of borrowers in high-income neighborhoods. With respect to refinance loans, minority and lower-income borrowers are again more likely to use nonconventional than conventional loans. In general, however, nonconventional loans are less prevalent in refinance lending.²³

²³ The reported nonconventional share of refinance loans is lower than the true share for the groups categorized

Table 4. Nonconventional share of home loans, by purpose of loan, 2004–14 Percent except as noted												
Characteristic of borrower and of neighborhood of borrower	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
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	16.0	14.7	
Black or African American	21.7	14.3	13.6	21.7	64.1	82.0	82.9	80.3	77.2	70.6	68.0	
Hispanic white	13.7	7.5	7.0	12.4	51.4	75.4	77.0	74.1	70.7	62.8	59.5	
Non-Hispanic white	11.1	8.9	9.5	11.5	35.4	52.0	50.3	47.4	42.2	35.3	33.4	
Other minority ²	14.0	9.3	9.4	14.8	48.4	67.6	68.8	65.9	62.2	55.3	53.9	
Joint	16.9	12.8	14.4	17.2	46.4	59.4	56.3	53.6	48.9	41.8	41.3	
Missing	11.3	5.1	5.7	8.8	32.7	50.6	49.4	45.9	39.4	31.9	32.2	
Borrower income ³												
Low or moderate	20.3	15.2	14.9	16.0	46.1	65.3	66.6	64.5	59.7	52.3	50.2	
Middle	14.3	11.0	12.6	16.8	46.1	60.4	59.3	57.0	51.5	45.5	44.7	
High	5.3	3.9	4.9	7.5	26.7	38.5	37.2	34.3	29.5	25.0	24.2	
Neighborhood income ⁴												
Low or moderate	15.8	9.7	9.6	13.8	45.5	64.4	65.1	61.2	57.9	49.6	48.0	
Middle	14.1	10.2	10.8	14.2	42.7	59.8	59.4	56.9	52.0	44.5	43.0	
High	7.1	5.4	6.1	7.6	27.4	43.4	42.0	39.5	34.6	28.0	26.1	
Memo: All borrowers	11.9	8.5	9.0	11.8	37.6	54.4	53.4	50.5	45.2	38.0	36.6	
B. Refinance												
Borrower race and ethnicity ¹												
Asian	1.2	.7	.6	1.0	4.6	5.7	4.7	4.3	5.9	6.7	6.9	
Black or African American	11.1	5.8	4.4	10.2	39.2	53.8	42.0	37.8	38.6	37.0	40.3	
Hispanic white	5.6	2.6	1.9	3.9	20.5	36.2	28.1	22.9	26.9	25.7	21.4	
Non-Hispanic white	4.0	2.4	2.6	4.9	15.9	16.8	13.6	12.2	14.2	14.8	16.5	
Other minority ²	5.5	3.4	2.4	4.9	20.0	28.3	23.3	21.9	25.5	24.9	25.7	
Joint	7.5	3.7	3.4	6.2	19.5	21.1	16.6	16.3	20.1	20.4	26.6	
Missing	4.2	1.9	1.7	4.1	18.7	19.0	12.5	13.6	16.5	16.8	21.8	
Borrower income ³												
Low or moderate	2.3	1.6	2.9	5.7	18.3	16.6	14.0	11.5	9.3	9.4	13.0	
Middle	1.7	1.3	2.7	6.2	19.6	13.2	12.2	10.9	8.9	9.6	13.3	
High	.8	.6	1.1	2.7	10.5	7.2	6.7	6.3	5.5	6.2	8.8	
Neighborhood income ⁴												
Low or moderate	5.9	3.2	2.9	6.3	24.6	31.3	23.1	19.7	22.2	22.1	23.0	
Middle	5.2	3.0	2.9	5.8	20.2	22.3	17.5	16.1	18.4	18.9	21.3	
High	2.9	1.7	1.6	3.0	11.3	12.1	10.0	9.3	11.7	12.4	14.6	
Memo: All borrowers	4.6	2.6	2.5	5.0	17.6	18.7	14.4	13.3	15.6	16.4	18.7	

Note: First-lien mortgages for one- to four-family, owner-occupied, site-built homes. Nonconventional loans are those insured by the Federal Housing Administration or backed by guarantees from the U.S. Department of Veterans Affairs, the Farm Service Agency, or the Rural Housing Service.

¹ See table 2, note 1.

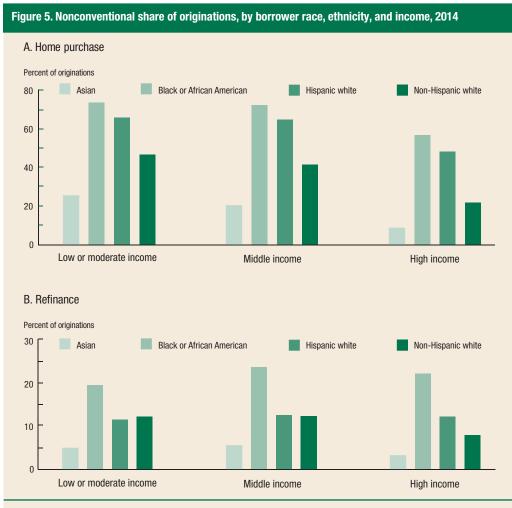
² See table 2, note 2.

³ See table 2, note 3.

⁴ See table 2, note 4.

Black and Hispanic white borrowers tend to have lower incomes, on average, than non-Hispanic white borrowers. Still, racial and ethnic differences in nonconventional loan use persist within income groups. Figure 5 displays the nonconventional share of home-purchase and refinance loans for Asian, black, Hispanic white, and non-Hispanic white borrowers split into LMI, middle-income, and high-income groups. For home-purchase loans, black

by borrower income because, in most nonconventional refinance loans, income is not reported. Thus, when income is reported on a refinance loan, the loan is likely to be conventional.



Note: The data are annual. Mortgage originations for first-lien, one- to four-family, owner-occupied properties. For definition of borrower race and ethnicity, see table 2, note 1. For explanation of borrower income, see table 2, note 3. For definition of nonconventional loans, see table 5, note 1.

and Hispanic white borrowers were much more likely than non-Hispanic white borrowers to get nonconventional loans within each income grouping. For refinance loans, a substantial black–white gap persists across income groups, but LMI and middle-income Hispanic white borrowers use nonconventional loans at approximately the same rate as their non-Hispanic white counterparts.

Greater reliance on nonconventional loans may reflect the relatively low down-payment requirements of the FHA and VA lending programs, which serve the needs of borrowers who have few assets to meet down-payment and closing-cost requirements.²⁴ The patterns of product incidence could also reflect the behavior of lenders to some extent; for example, concerns have been raised about the possibility that lenders steer borrowers in certain neighborhoods toward nonconventional loans.²⁵

²⁴ Findings of the Federal Reserve Board's Survey of Consumer Finances for 2010 indicate that 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. See Board of Governors of the Federal Reserve System, "2010 Survey of Consumer Finances," webpage, www.federalreserve.gov/econresdata/scf/scf_2010.htm.

²⁵ See, for example, Glenn B. Canner, Stuart A. Gabriel, and J. Michael Woolley (1991), "Race, Default Risk and

Denial Rates and Denial Reasons

In 2014, the overall denial rate on applications for home-purchase loans of 13.2 percent was somewhat lower than in 2013, while the denial rate for refinance loan applications of 30.6 percent was substantially higher than in 2013 (table 5).²⁶ Over longer horizons, denial rates have exhibited significant variation, and these changes differ by type of loan. For example, for conventional home-purchase loan applications, the denial rate of 11.7 percent in 2014 was 6.8 percentage points lower than in 2006, while for nonconventional home-purchase loan applications, the denial rate of 15.6 percent in 2014 was 3.5 percentage points higher than in 2006. Changes 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 2014 than during the housing boom years, even though most measures of credit availability suggest that credit standards are tighter today.²⁷ This result may stem from a relatively large drop in applications from riskier applicants.

As in past years, black, Hispanic white, and "other minority" borrowers had notably higher denial rates in 2014 than non-Hispanic white borrowers, while denial rates for Asian borrowers were more similar to those for non-Hispanic white borrowers. For example, the denial rates for conventional home-purchase loans were about 25 percent for black borrowers, 19 percent for Hispanic white borrowers, 20 percent for other minority borrowers, 12 percent for Asian borrowers, and 10 percent for non-Hispanic white borrowers.

Previous research and experience gained in the fair lending enforcement process show that differences in denial rates and in the incidence of higher-priced lending (the topic of the next subsection) among racial or ethnic groups stem, at least in part, from factors related to credit risk that are not available in the HMDA data, such as credit history (including credit scores) and LTV ratios. Differential costs of loan origination and the competitive environment also may bear on the differences in pricing, as may differences across populations in credit-shopping activities.

Despite these limitations, the HMDA data play an important role in fair lending enforcement. The data are regularly used by bank examiners to facilitate the fair lending examination and enforcement processes. When examiners for the federal banking agencies evaluate an institution's fair lending risk, they analyze HMDA price data and loan application outcomes in conjunction with other information and risk factors that can be drawn directly from loan files or electronic records maintained by lenders, as directed by the Interagency Fair Lending Examination Procedures.²⁸ The availability of broader information allows the examiners to draw stronger conclusions about institution compliance with the fair lending laws.

Lenders can, but are not required to, report up to three reasons for denying a mortgage application, selecting from nine potential denial reasons (table 6). Among denied first-lien applications for one- to four-family, owner-occupied, site-built properties in 2014, about

Mortgage Lending: A Study of the FHA and Conventional Loan Markets," *Southern Economic Journal*, vol. 58 (July), pp. 249–62.

²⁶ 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.

²⁷ Both the Mortgage Bankers Association and the Urban Institute publish indexes of mortgage credit availability suggesting that standards have been much tighter since the crisis. See Wei Li, Laurie Goodman, Ellen Seidman, Jim Parrott, Jun Zhu, and Bing Bai (2014), "Measuring Mortgage Credit Accessibility," working paper (Washington: Urban Institute, November), www.urban.org/research/publication/measuring-mortgage-creditaccessibility.

²⁸ The Interagency Fair Lending Examination Procedures are available at www.ffiec.gov/PDF/fairlend.pdf.

Table 5. Denial rates, by purpose Percent	of loan,	2004–	14								
Type of loan and race and ethnicity of borrower	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
A. Home purchase	_			1			I	1		I	1
Conventional and nonconventional ¹			10.0	40 -							
All applicants	14.4	16.0	18.0	18.7	18.0	15.5	15.6	15.8	14.9	14.5	13.2
Asian	13.7	15.9	16.9	17.5	19.2	16.3	15.8	16.5	15.8	15.1	13.9
Black or African American	23.6	26.5	30.3	33.5	30.6	25.5	24.8	26.0	26.0	25.5	22.7
Hispanic white	18.3	21.1	25.1	29.5	28.3	22.2	21.8	21.1	20.2	20.5	18.1
Non-Hispanic white	11.1	12.2	12.9	13.3	14.0	12.8	12.9	13.1	12.5	12.2	11.0
Other minority ²	19.4	20.8	24.0	26.7	25.5	21.2	21.9	20.9	20.8	21.5	18.8
Conventional only		10.0	10 5	10.0	10.0	45.0	45.0		10.0	10.0	44.7
All applicants	14.6	16.3	18.5	19.0	18.3	15.8	15.2	15.1	13.6	12.9	11.7
Asian Black or African American	13.7	16.0	17.1	17.5	19.1	15.8	14.8	15.5	14.4	13.9	13.0
Black or African American	25.0	27.8	31.9	35.7	37.6	35.8	33.6	33.2	32.0	28.5	24.6
Hispanic white	18.6	21.4	25.7	30.5	32.5	26.9	24.9	24.2	22.4	21.5	18.7
Non-Hispanic white	11.2	12.3	13.2	13.3	14.1	13.3	12.9	12.7	11.6	10.9	9.8
Other minority ²	19.7	21.2	24.8	27.8	29.0	25.9	28.0	24.6	23.6	22.6	20.1
Nonconventional only ¹	13.3	12.5	12.1	16.2	17.4	15.3	16.0	16.5	16.3	17.0	15.6
All applicants Asian	13.3	12.5	12.1	15.5	20.2	15.3 17.7	18.6	10.5 19.3	20.2	20.7	18.6
Black or African American	12.0	16.8	10.6	15.5 22.8	20.2 25.3	22.6	22.7	23.9	20.2 24.0	20.7	21.7
	16.3	10.0	15.7	22.8 20.5	20.3 23.1	22.0 20.4	22.7	23.9 19.9	24.0 19.3	24.2 20.0	17.7
Hispanic white Non-Hispanic white	10.3	17.2	10.0	20.5 13.1	23.1 13.9	20.4 12.5	20.7 13.0	19.9 13.6	19.3 13.7	20.0 14.4	13.2
Other minority ²	16.8	16.3	15.2	18.6	20.9	12.5	18.7	18.8	18.9	20.5	17.7
B. Refinance	10.0	10.5	10.2	10.0	20.9	10.7	10.7	10.0	10.9	20.5	17.7
Conventional and nonconventional ¹											
All applicants	29.5	32.6	35.4	39.6	37.7	24.0	23.3	23.8	19.9	22.7	30.6
Asian	18.8	23.5	27.5	32.6	32.5	24.0	23.3 19.5	20.1	17.3	20.5	27.5
Black or African American	39.9	42.2	44.1	52.0	56.0	42.2	41.7	40.0	32.8	33.9	45.4
Hispanic white	28.7	30.1	33.2	43.0	49.1	36.4	33.4	33.2	27.5	28.7	36.0
Non-Hispanic white	24.1	26.9	30.1	33.7	32.2	20.7	20.6	21.3	17.8	20.7	27.1
Other minority ²	33.7	35.5	40.6	52.0	57.4	37.3	35.3	34.4	30.0	30.5	41.3
Conventional only	55.7	55.5	40.0	52.0	57.4	57.5	00.0	54.4	50.0	00.0	41.5
All applicants	30.1	32.9	35.6	39.9	37.0	22.1	21.3	22.3	19.4	22.0	29.0
Asian	18.8	23.5	27.5	32.5	31.5	20.2	18.5	19.4	17.0	20.0	26.6
Black or African American	41.7	43.0	44.7	53.3	60.9	48.6	41.4	40.6	34.8	35.1	46.5
Hispanic white	29.3	30.2	33.3	43.2	50.2	38.9	33.6	33.5	28.9	29.8	36.5
Non-Hispanic white	24.6	27.1	30.4	33.9	31.5	19.1	18.9	20.1	17.4	19.4	25.7
Other minority ²	34.5	35.7	40.9	52.6	59.4	38.4	34.8	34.4	31.1	31.0	40.3
Nonconventional only ¹	20										
All applicants	15.0	20.1	21.9	31.6	40.9	31.1	33.3	32.2	22.2	25.9	36.5
Asian	15.0	20.0	22.0	38.5	48.9	37.2	34.2	32.7	22.2	26.1	37.5
Black or African American	17.5	23.6	24.6	33.7	43.5	35.1	42.2	39.1	29.5	31.6	43.8
Hispanic white	15.7	23.6	26.3	34.6	43.4	31.4	33.0	32.3	23.3	25.4	34.4
Non-Hispanic white	12.0	17.6	19.7	28.3	36.1	27.4	29.3	29.0	19.7	23.0	33.7
Other minority ²	15.2	25.8	22.2	34.8	45.4	34.1	37.0	34.4	26.6	28.9	43.9

Note: First-lien mortgages for one- to four-family, owner-occupied, site-built homes. Excludes applications where no credit decision was made. 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 Federal Housing Administration or backed by guarantees from the U.S. Department of Veterans Affairs, the Farm Service Agency, or the Rural Housing Service.

² See table 2, note 2.

75 percent of denied home-purchase applications and about 63 percent of denied refinance applications had at least one reported denial reason. The two most frequently cited denial reasons for both home-purchase and refinance loans were the applicant's credit history and DTI ratio (note that the columns in table 6 can add up to more than 100 percent because lenders can cite more than one denial reason). For both home-purchase and refinance

Percent										
Type of loan and race and ethnicity of borrower	Debt-to- income ratio	Employ- ment history	Credit history	Collateral	Insuf- ficient cash	Unveri- fiable infor- mation	Credit applica- tion incom- plete	Mortgage insurance denied	Other	No reas give
A. Home purchase	I					1	1			
Conventional and nonconvent	tional ¹									
All applicants	23.1	3.7	22.2	12.9	6.5	5.2	9.5	.6	10.5	25.
Asian	28.3	4.7	13.5	12.0	7.6	8.7	13.5	.6	11.4	20.
Black or African American	25.1	2.9	28.2	9.6	7.3	4.6	6.9	.6	10.0	27
Hispanic white	25.0	3.9	20.8	11.1	6.6	5.8	6.8	.5	12.0	28
Non-Hispanic white	21.9	3.8	21.8	14.1	6.2	4.9	9.8	.7	10.3	25
Other minority ²	23.6	3.4	26.6	9.7	7.3	5.3	7.0	.7	11.3	26
Conventional only										
All applicants	23.7	3.2	20.9	15.0	7.2	5.6	10.8	1.0	10.2	22
Asian	28.1	4.5	11.8	12.8	8.1	9.1	14.9	.7	11.3	19
Black or African American	24.5	2.2	32.2	12.1	8.5	4.3	6.9	1.4	10.1	23
lispanic white	25.4	3.1	22.1	13.8	7.6	6.1	7.5	1.0	12.5	24
Ion-Hispanic white	23.0	3.3	20.1	16.2	6.8	5.3	11.0	1.0	9.6	23
)ther minority ²	24.0	3.4	26.7	10.1	8.0	6.0	7.6	1.0	11.2	25
lonconventional only ¹										
All applicants	22.3	4.3	23.8	10.3	5.6	4.7	7.9	.1	11.0	28
Asian	29.0	5.2	20.0	9.2	5.8	7.3	7.9	.1	11.8	24
Black or African American	25.5	3.3	25.9	8.2	6.6	4.8	6.8	.1	10.0	29
lispanic white	24.8	4.5	19.9	9.2	5.8	5.7	6.2	.2	11.6	31
Non-Hispanic white	20.4	4.6	24.2	11.1	5.3	4.4	8.1	.2	11.3	28
Other minority ²	23.1	3.4	26.5	9.2	6.6	4.6	6.4	.4	11.3	27
3. Refinance										
Conventional and nonconvent	tional ¹									
All applicants	15.8	1.0	18.4	15.3	2.9	3.0	10.4	.1	8.1	36
Asian	25.4	1.6	15.3	12.3	3.3	5.3	10.0	.2	9.7	31
Black or African American	11.5	.5	20.0	12.8	3.3	2.0	7.7	.1	7.6	44
lispanic white	19.4	1.0	20.6	11.4	3.6	3.6	7.7	.2	9.5	36
Ion-Hispanic white	15.9	1.0	17.8	16.3	2.8	3.0	10.4	.1	8.0	35
)ther minority ²	16.4	.7	18.9	12.2	3.0	2.9	7.7	.1	8.3	41
Conventional only										
All applicants	18.7	1.1	19.8	15.7	2.8	3.4	10.3	.2	8.2	32
Isian	27.1	1.7	15.4	12.7	3.3	5.6	10.0	.2	9.8	29
Black or African American	14.6	.6	23.0	12.9	2.7	2.2	7.6	.2	7.1	41
lispanic white	21.7	1.0	21.5	11.8	3.4	3.8	7.5	.2	9.0	34
Ion-Hispanic white	18.5	1.1	19.1	16.7	2.7	3.3	10.3	.2	8.1	32
)ther minority ²	19.8	.8	21.2	12.5	2.9	3.2	7.8	.1	8.7	35
lonconventional only ¹										
All applicants	7.0	.7	14.0	14.1	3.3	2.0	10.7	.03	7.7	47
Isian	11.5	1.0	14.7	9.4	3.1	3.2	9.7	.05	9.3	47
Black or African American	6.2	.4	15.2	12.7	4.2	1.7	7.7	.01	8.3	51
lispanic white	10.1	.9	17.1	9.7	4.8	2.7	8.6	.05	11.5	43
Ion-Hispanic white	7.0	.7	13.4	15.0	3.1	2.0	10.7	.03	7.6	47
Other minority ²	7.8	.4	13.3	11.6	3.4	2.1	7.6	.03	7.2	54

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.

applications, collateral is more likely to be cited as a denial reason on conventional than nonconventional applications. For refinance applications, the DTI ratio is more likely to be cited as a denial reason on conventional than nonconventional applications.

Denial reasons vary across racial and ethnic groups to some degree. For example, among denied home-purchase loan applications in 2014, credit history was cited as a denial reason for 28 percent of denied black applicants, 21 percent of denied Hispanic white applicants, 22 percent of denied non-Hispanic white applicants, and just 13 percent of denied Asian applicants. The DTI ratio was cited most often as a denial reason for Asian home-purchase applicants at 28 percent, compared with 22 percent for non-Hispanic white applicants at the lower end. Finally, collateral was cited most often as a denial reason on home-purchase applications for non-Hispanic white applicants at 14 percent, compared with 10 percent for black applicants.

The Incidence of Higher-Priced Lending

Current price-reporting rules under HMDA, in effect since October 2009, define higherpriced first-lien loans as those with an annual percentage rate (APR) of at least 1.5 percentage points above the average prime offer rate (APOR) for loans of a similar type (for example, a 30-year fixed-rate mortgage).²⁹ The spread for junior-lien loans must be at least 3.5 percentage points for such loans to be considered higher priced. The APOR, which is published weekly by the Federal Financial Institutions Examination Council, 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.³⁰

In 2014, the fraction of home-purchase loans (again, first liens for one- to four-family, owner-occupied, site-built properties) above the higher-priced threshold increased to 11.5 percent from 7.1 percent in 2013 (table 7.A). This increase stemmed from a rise in the higher-priced share of nonconventional loans from 13.8 percent to 26 percent, while the higher-priced share of conventional loans increased only slightly, from 2.9 percent to 3.1 percent.

The higher-priced fraction of FHA home-purchase loans spiked from about 5 percent in early 2013 to about 40 percent after May 2013 and continued at monthly rates between 35 and 52 percent through 2014, for an annual average incidence of about 44 percent in 2014 (table 8). In contrast, less than 1 percent of VA and FSA/RHS home-purchase loans were higher priced in 2014. Increases in the FHA's MIP and the term length over which it must be paid appear to have pushed many FHA home-purchase loans just over the reporting threshold; as shown in table 8, over 75 percent of higher-priced FHA home-purchase loans were within 0.5 percentage point of the higher-priced threshold. With the FHA reducing the MIP by 0.5 percentage point in January 2015, the fraction of FHA borrowers above the reporting threshold may fall in next year's data.

There was a smaller increase in the higher-priced fraction of refinance mortgages—to 3.3 percent from 1.9 percent in 2013 (as shown in table 7.A). This increase was also largely driven by the higher-priced share of FHA refinance loans, which rose to 15.7 percent from 6.2 percent in 2013.

Table 7.A also shows that, in 2014 as well as earlier years, black and Hispanic white borrowers had the highest incidences of higher-priced loans within both the conventional and

²⁹ For more information about the rule changes related to higher-priced lending and the ways in which they affect the incidence of reported higher-priced lending over time, see Avery and others, "The 2009 HMDA Data," in note 11.

³⁰ See Freddie Mac, "Mortgage Rates Survey," webpage, www.freddiemac.com/pmms; and Federal Financial Institutions Examination Council, "FFIEC Rate Spread Calculator," webpage, www.ffiec.gov/ratespread/ newcalc.aspx.

Table 7. Incidence of higher-priced lending, by purpose of loan, 2004–14 A. Unadjusted											
Percent											
Type of loan and race and ethnicity of borrower	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Home purchase											
Conventional and nonconventional ¹											
All borrowers	9.8	22.5	23.2	12.7	8.1	4.6	2.2	3.3	3.1	7.1	11.5
Asian	5.5	16.3	16.4	7.6	4.0	2.4	1.0	1.5	1.4	3.0	5.1
Black or African American	24.3	46.7	46.4	27.6	14.5	7.1	3.0	5.0	5.3	14.2	25.5
Hispanic white	17.5	42.0	43.3	25.9	15.8	8.1	3.9	6.1	5.9	16.8	28.3
Non-Hispanic white	7.8	15.5	16.0	9.6	7.2	4.3	2.2	3.1	2.9	6.1	9.4
Other minority ²	14.4	30.3	30.7	16.1	9.1	5.3	2.3	3.5	3.4	8.7	13.5
Conventional only											
All borrowers	11.0	24.5	25.3	14.0	7.3	4.6	3.3	3.8	3.2	2.9	3.1
Asian	5.6	16.6	16.7	7.7	3.3	1.9	1.0	1.3	1.2	1.1	1.5
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
Hispanic white	20.0	45.3	46.3	28.9	17.7	11.0	9.6	10.7	8.7	7.3	6.5
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
Other minority ²	16.1	33.3	33.6	18.5	9.5	6.7	4.6	5.5	5.1	4.9	5.0
Nonconventional only ¹											
All borrowers	1.2	.9	1.8	3.0	9.5	4.6	1.3	2.7	3.0	13.8	26.0
Asian	2.4	.6	.8	1.3	8.2	3.9	.8	2.0	1.9	13.1	26.0
Black or African American	1.4	1.6	2.5	4.5	12.8	6.8	2.4	4.3	4.9	17.6	33.8
Hispanic white	2.0	1.4	3.5	4.5	14.0	7.1	2.2	4.5	4.8	22.4	43.0
Non-Hispanic white	1.0	.7	1.5	2.5	8.4	3.9	1.0	2.3	2.6	12.0	22.2
Other minority ²	4.4	.7	2.1	2.4	8.8	4.7	1.2	2.5	2.4	11.7	20.7
Refinance											
Conventional and nonconventional ¹											
All borrowers	14.5	25.0	30.3	21.0	10.9	3.8	1.8	2.1	1.5	1.9	3.3
Asian	5.8	15.1	19.5	12.5	3.1	.9	.4	.5	.4	.5	1.1
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
Hispanic white	18.2	32.6	36.9	26.5	15.1	7.0	4.4	4.4	2.6	3.1	4.8
Non-Hispanic white	12.3	20.4	25.0	17.6	10.2	3.7	1.8	2.2	1.5	2.0	3.3
Other minority ²	17.6	26.9	32.3	23.8	13.9	4.7	2.6	2.6	2.0	2.2	3.0
Conventional only											
All borrowers	15.2	25.7	31.0	21.8	10.4	3.1	1.3	1.5	1.2	1.5	2.2
Asian	5.8	15.2	19.6	12.5	2.9	.7	.2	.3	.3	.3	.7
Black or African American	33.7	49.0	52.8	41.5	27.6	9.9	4.0	4.2	2.9	3.3	4.1
Hispanic white	19.2	33.4	37.5	27.3	16.0	7.2	3.3	3.3	2.3	2.4	2.8
Non-Hispanic white	12.8	20.9	25.6	18.2	9.8	3.1	1.3	1.6	1.2	1.6	2.4
Other minority ²	18.2	27.7	32.9	24.5	14.7	4.8	1.9	2.2	1.7	2.0	2.2
Nonconventional only ¹	1.5	0	0.1	6.6	10.0	6.7	4.0	E O	2.0	2.0	7.0
All borrowers	1.5	.9	3.1	6.6	13.2	6.7	4.9	5.9	3.2	3.9	7.9
Asian Block or African American	3.6	2.1	2.5	4.9	8.9	4.8	3.1	4.0	1.8	2.6	6.8 o 1
Black or African American	1.0	1.2	4.1	7.8	15.2	8.2 6.6	9.8 7.2	10.9	6.0 2.6	4.6	8.1
Hispanic white Non-Hispanic white	2.0	.9 .7	2.6 2.8	6.2 6.0	11.6	6.6	7.3	7.9	3.6	5.1	11.8
	1.3				12.1	6.5	4.6	5.9	3.3	4.2	8.3
Other minority ²	8.1	3.9	9.6	9.9	10.5	4.5	4.6	4.3	2.9	2.9	5.2

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 See table 5, note 1.

² See table 2, note 2.

nonconventional loan types. The table provides the raw rates of higher-priced lending by group from 2004 to 2014, but, as discussed in detail in previous *Bulletin* articles, the raw rates reported in the public HMDA data can be difficult to compare over longer time horizons for two main reasons. First, a different price-reporting rule was in place prior to October 2009, with the spread between a mortgage's APR and the rate on a Treasury bond of

Table 7. Incidence of higher-price B. Adjusted Percent	ed lendir	ng, by p	ourpos	e of loa	an, 200	4–14					
Type of loan and race and ethnicity of borrower	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Home purchase											
Conventional and nonconventional ¹											
All borrowers	7.4	18.3	17.1	6.3	1.3	1.3	.6	.8	.8	.7	.8
Asian	3.8	13.0	11.4	3.1	.5	.5	.3	.3	.3	.3	.4
Black or African American	19.3	40.3	38.5	16.7	1.9	1.3	.6	.7	.9	1.1	1.2
Hispanic white	12.3	34.5	32.8	13.0	2.1	1.4	1.0	1.3	1.6	1.6	1.6
Non-Hispanic white	5.8	12.1	10.9	4.3	1.3	1.4	.7	.8	.8	.7	.7
Other minority ²	10.5	24.7	22.7	8.0	1.5	1.4	.8	.9	1.1	.9	.9
Conventional only											
All borrowers	8.2	20.0	18.7	7.1	1.9	2.3	1.3	1.4	1.2	.9	.8
Asian	3.8	13.3	11.6	3.2	.5	.6	.3	.4	.4	.3	.4
Black or African American	24.4	46.9	44.5	21.2	4.7	4.0	2.6	2.6	2.7	1.8	1.4
Hispanic white	14.0	37.2	35.2	14.8	3.9	4.6	3.9	4.1	4.5	2.8	2.3
Non-Hispanic white	6.5	13.2	12.0	4.9	1.9	2.6	1.3	1.5	1.2	.8	.7
Other minority ²	11.6	27.2	25.0	9.3	2.7	3.7	2.3	2.5	2.6	1.7	1.3
Nonconventional only ¹											
All borrowers	.9	.3	.2	.3	.4	.4	.1	.2	.3	.5	.7
Asian	2.2	.3	.1	.2	.2	.2	.1	.2	.2	.3	.4
Black or African American	1.0	.5	.3	.6	.4	.7	.2	.3	.3	.8	1.1
Hispanic white	1.6	.3	.3	.2	.5	.4	.1	.3	.3	.8	1.1
Non-Hispanic white	.8	.2	.0	.2	.0	.3	.1	.0	.3	.5	.7
Other minority ²	3.9	.3	.2	.2	.3	.3	.1	.1	.2	.3	.6
Refinance	0.0										.5
Conventional and nonconventional ¹											
All borrowers	11.3	20.1	21.3	12.7	4.3	1.4	.6	.8	.7	.7	1.0
Asian	4.1	12.2	12.1	5.4	.8	.2	.1	.0	.1	.1	.2
Black or African American	24.3	38.5	39.0	26.4	10.6	3.5	2.6	3.3	2.5	1.6	2.0
Hispanic white	13.4	27.0	25.8	14.8	5.6	2.5	1.8	1.8	1.1	.9	1.0
Non-Hispanic white	9.5	15.9	16.9	10.3	4.1	1.4	.6	.8	.7	.5	1.1
Other minority ²	13.2	22.0	22.3	14.5	7.1	2.1	.0	1.1	1.1	.7	.9
Conventional only	10.2	22.0	22.0	14.0	7.1	2.1	.0			.0	.5
All borrowers	11.8	20.7	21.9	13.3	5.1	1.5	.5	.6	.4	.4	.7
Asian	4.1	12.3	12.1	5.4	.9	.2	.1	.0	.4	.4 0	.1
Black or African American	27.3	40.8	40.7	29.4	.5 17.1	6.3	2.0	1.8	1.0	1.0	1.4
Hispanic white	14.1	27.7	26.2	15.4	6.9	3.5	1.4	1.3	.8	.7	.8
Non-Hispanic white	9.9	16.3	17.3	10.9	4.8	3.5 1.6	.5	.6	.o .4	.7	.0 .8
Other minority ²	9.9 13.6	22.6	22.7	14.9	4.0 8.3	2.8	.5 .9	.0 .9	.4	.5	.0 .7
Nonconventional only ¹	13.0	22.0	22.1	14.5	0.5	2.0	.9	.5	.1	./	.1
All borrowers	1.0	.6	.7	.5	.4	.5	1.2	2.5	2.4	1.8	2.1
Asian	2.9	.0 1.8	. <i>1</i> 1.3	.ə 1.4	.4 .5	.5 .3	.5	2.5 1.5	2.4 1.4	1.0 1.1	1.6
Asian Black or African American	2.9	1.8	1.3	1.4 .6	.5 .5	.3 1.1	.5 3.5	1.5 5.9	1.4 4.9	2.6	2.8
	.0 1.4	.8 .4	.3	.0 .6	.5 .7	1.1 .8	3.5 2.8	5.9 3.5	4.9 1.9	2.6 1.3	2.8
Hispanic white											
Non-Hispanic white	.8	.4	.4	.3	.4	.5	1.0	2.4	2.5	2.1	2.5
Other minority ²	6.3	3.4	7.8	6.3	1.9	.4	1.1	2.0	2.2	1.3	1.5

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. See text for details on how adjusted incidences of higher-priced lending are calculated.

¹ See table 5, note 1.

² See table 2, note 2.

comparable term (rather than the APOR) reported if it rose above 3 percentage points.³¹ Second, the previous price-reporting rule created unintended distortions in reporting over

³¹ The reporting threshold for junior liens was 5 percentage points.

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Table 8. Distribution of price Percent except as noted	ce spread, 20	14							
			Loans	with APOR s	pread abo	ve 1.5 perc	entage poi	nts ¹	
Purpose and type of loan	Total number	Martin	Dented	Dis	tribution, I	oy percenta	ge points o	of APOR spr	ead
		Number	Percent	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	1,735,766	53,654	3.1	56.3	18.5	10.8	8.6	3.1	2.6
FHA ²	583,539	258,647	44.3	76.2	21.0	2.1	.6	.03	.05
VA/RHS/FSA ³	417,201	1,538	.4	79.5	12.9	1.4	.9	3.1	2.3
Refinance									
Conventional	1,561,325	34,546	2.2	48.1	19.8	11.3	11.8	5.0	4.1
FHA ²	170,306	26,675	15.7	58.0	13.8	6.0	19.6	1.5	1.1
VA/RHS/FSA ³	189,626	1,745	.9	88.6	1.0	2.0	1.2	6.2	1.1
Manufactured homes									
Home purchase									
Conventional	50,957	39,193	76.9	6.1	4.7	6.8	13.7	12.9	55.8
FHA ²	12,231	8,163	66.7	53.4	31.3	7.0	4.0	4.3	.01
VA/RHS/FSA ³	4,012	46	1.2	87.0	10.9	0	2	0	.01
Refinance									
Conventional	20,405	6,147	30.1	20.6	14.7	14.0	21.9	12.4	16.4
FHA ²	5,009	1,034	20.6	60.1	21.3	6.3	11.5	.7	.2
VA/RHS/FSA ³	3,162	25	.8	84.0	12	0	0	4	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 Federal Housing Administration.

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

time (which is why the reporting rule was changed), so data from years prior to 2009 are not even directly comparable from year to year.³²

Table 7.B provides adjusted rates of higher-priced lending that are intended to be more comparable over time. Using the dates of application and origination (which are not released in the public HMDA data files) and assuming all loans are 30-year fixed-rate mortgages, we can estimate the APR of loans that were originated under the old pricing rule.³³ This estimated APR can then be compared with the APOR, as is done under the new price-reporting rule. Finally, because the implied threshold spread over the APOR during the previous reporting regime got to as high as about 2.5 percentage points, table 7.B reports the fraction of loans with an estimated APR spread over the APOR (or the actual reported spread for loans made under the new rules) of at least 2.5 percentage points—

³² These distortions are related to the fact that changes in long-term Treasury rates do not always lead to parallel changes in mortgage rates. For a discussion of how the old rule could produce misleading data about trends in higher-priced lending, see Neil Bhutta and Daniel R. Ringo (2014), "The 2013 Home Mortgage Disclosure Act Data," *Federal Reserve Bulletin*, vol. 100 (November), pp. 1–32, www.federalreserve.gov/pubs/bulletin/2014/ default.htm.

³³ The assumption that all mortgages were fixed rate likely understates the extent of higher-priced lending during the early years of the housing boom. During this period, adjustable-rate mortgages were quite prevalent, and the APRs on such loans are tied to even shorter-term Treasury rates than fixed-rate mortgages. Thus, when the yield curve is relatively steep, as it was in 2004, the bar for adjustable-rate mortgages to be reported as higher priced would have been even higher than for fixed-rate mortgages.

rather than 1.5 percentage points, as in table 7.A.³⁴ Higher-priced lending by this measure virtually disappeared by 2008 and has not reemerged, likely reflecting the lack of subprime mortgage lending.

Regulatory Changes

Several significant changes to the regulation of the mortgage market took place in 2014. This section briefly discusses the new rules and analyzes some possible effects of these new rules.

Ability-to-Repay and Qualified Mortgage Rules

On January 10, 2014, the CFPB's final ATR and QM rules, pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, went into effect. To help ensure that lenders make a reasonable, good faith determination that borrowers will be able to repay their mortgage loans, the new ATR rules require lenders to meet minimum under-writing standards, such as considering and verifying a mortgage applicant's assets or income, debt load, and credit history for most closed-end residential mortgage loans. Borrowers may allege a violation of the ATR requirement within three years of the date of violation or use a violation of the ATR requirement as a defense to foreclosure for the life of the loan. Lenders that are found to violate the ATR rules can be liable for monetary damages.

Lenders are presumed to comply with the ATR requirement when they make a QM loan, which must meet further underwriting and pricing standards.³⁵ These requirements generally include a limit on points and fees to 3 percent of the loan amount and various restrictions on loan terms and features (for example, no negative amortization or interest-only payments and a loan term of 30 years or less).³⁶ QM loans also generally require that the borrower's total DTI ratio does not exceed 43 percent. However, currently, the 43 percent DTI cap does not apply to FHA, VA, FSA, and RHS loans, loans that are eligible for purchase by the GSEs, and portfolio loans made by small creditors.

The HMDA data can provide some insight into whether these new rules had an effect on credit availability, although they are an imperfect resource. For example, if the new rules discouraged lending to riskier borrowers, they could have led to a significant reduction in the share of loans to minority and LMI borrowers, who tend to have lower assets and credit scores and higher DTI ratios.³⁷ However, as discussed earlier, black and Hispanic

³⁴ For a more detailed discussion of this adjustment technique, see Avery and others, "The 2009 HMDA Data," in note 11.

³⁵ In fact, there are two levels of legal protection: a "safe harbor" (that is, a conclusive presumption of compliance) for QM loans that are not higher priced (first liens with an APR that is less than 1.5 percentage points above the APOR or junior liens with an APR that is less than 3.5 percentage points above the APOR) and a "rebuttable presumption of compliance" for QM loans that are higher priced. For FHA loans, the safe harbor is given to loans with APRs that are equal to or less than 1.15 percentage points plus the ongoing MIP over the APOR. Most VA loans have safe-harbor status regardless of the APR. The safe-harbor price threshold also differs for small creditors.

³⁶ For information on how the terms "points and fees" and "loan amount" are defined for the purposes of QMs and other guidance on the rules, see Consumer Financial Protection Bureau (2014), *Ability-to-Repay and Qualified Mortgage Rule: Small Entity Compliance Guide* (Washington: CFPB, November 3), http://files.consumerfinance.gov/f/201411_cfpb_atr-qm_small-entity-compliance-guide.pdf.

³⁷ For data on credit scores and DTI ratios by borrower race and income, see Neil Bhutta and Glenn B. Canner (2013), "Mortgage Market Conditions and Borrower Outcomes: Evidence from the 2012 HMDA Data and Matched HMDA–Credit Record Data," *Federal Reserve Bulletin*, vol. 99 (November), pp. 1–58, www.federalreserve.gov/pubs/bulletin/2013/default.htm.

white borrowers' share of home-purchase loans increased in 2014 after having declined for several years. In addition, if the QM cap on the DTI ratio for conventional non-GSE loans was binding, there could have been a significant increase in the frequency at which lenders cited the DTI ratio as a reason for denial. However, there was little change in this frequency.³⁸ Also, as will be discussed later, jumbo home-purchase loans, which are not eligible for GSE purchase and would be subject to the DTI cap to qualify as QMs, grew much more rapidly than other home-purchase loans.

To explore further, this section examines whether the rules may have curbed high-DTI loans. The HMDA data do not provide all of the information necessary to calculate DTI ratios, so we cannot directly measure how the frequency of loans with DTI ratios in excess of 43 percent has changed with the introduction of the ATR and QM rules. Other debts, such as auto loans and student loans, are added to monthly mortgage obligations in the numerator of the DTI calculation. The term of the loan, which is not reported under HMDA, can also affect the DTI ratio, as a shorter term increases monthly mortgage payments, holding all else equal.

With these caveats in mind, we may still be able to glean some useful information on the extent of high-DTI lending. For each HMDA loan with a reported income, we estimate a "front end" DTI ratio based on the loan amount, income, origination date, and reported spread over the APOR. This approximate DTI ratio is the ratio of monthly mortgage payment (principal and interest only) to income, assuming that the loan follows a 30-year fixed-rate structure, with all points and fees financed over the life of the loan. The interest rate is assumed to be the reported spread over the APOR plus the APOR taken from two weeks before the loan was originated. If the spread was below the reportable threshold, the interest rate is assumed to be the APOR plus 0.25 percentage point for conventional loans.³⁹ For example, for a loan of \$100,000 to a borrower with annual income of \$50,000, an unreported spread, and the relevant APOR equal to 4 percent, the approximate DTI ratio would be 11.8 percent.

Figure 6 displays the distributions of these approximate DTI ratios by demographic group in 2013 and 2014 (additional data are reported in table 9). The 2014 data are restricted to loans with an application date on or after January 10, 2014, the date when the ATR rules were implemented. Again, the estimated front-end DTI ratios are lower than the "back end" DTI ratios lenders actually use to assess the ATR and QM eligibility, which include other housing-related obligations, such as taxes and insurance, as well as nonmortgage debt payments. That said, if the ATR and QM rules were a significant deterrent to loans with a back-end DTI ratio above 43 percent, we might expect to see the upper percentiles of the estimated front-end DTI ratio decrease noticeably between 2013 and 2014. In fact, the distributions look quite similar across the two years.⁴⁰ Even for conventional jumbo loans, which are not eligible for purchase by the GSEs and therefore must have a DTI below

³⁸ The frequency with which the DTI ratio was cited as a denial reason edged up to 23.1 percent from 22.1 percent in 2013 for denied home-purchase applications and dropped slightly to 15.8 percent from 16.6 percent for refinance denials.

³⁹ The lack of data on spreads below the reporting threshold could mask some small changes in the distribution of DTI ratios between 2013 and 2014. In the absence of data on the true APRs, we assume a spread of 0.25 percentage point on conventional and VA loans to reflect the fact that interest rates near the prevailing prime rate are more common than those far from it. For FHA loans without a reported spread, we assume a spread of 1.35 percentage points for loans with an application date on or after April 1, 2013. For loans with an application date before April 1, 2013, we assume a spread of 1.25 percentage points for FHA home-purchase loans and a spread of 0.75 percentage point for FHA refinancings. These spreads reflect the typical MIP rates. FSA and RHS loans are assumed to have a spread of 0.5 percentage point if no spread is reported to match the guarantee fees. The approximate DTI ratios are capped at 51 percent, as extremely high values likely reflect misreported data.

⁴⁰ As seen in table 9, the 90th and 95th percentiles of the approximate DTI ratio for refinance loans to LMI bor-

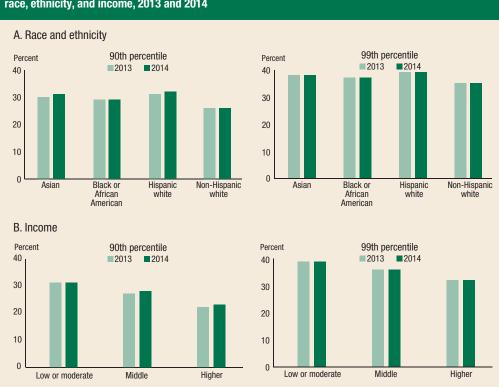


Figure 6. Percentiles of approximate debt-to-income ratios for home-purchase mortgages, by borrower race, ethnicity, and income, 2013 and 2014

Note: The data are annual. First-lien home-purchase mortgages for one- to four-family, owner-occupied, site-built homes. The data for 2014 are restricted to loans with an application date on or after January 10, 2014. For definition of borrower race and ethnicity, see table 2, note 1. For explanation of borrower income, see table 2, note 3.

43 percent in order to be a QM, the estimated DTI ratios largely held steady between 2013 and 2014.

A number of factors may help explain why the ATR and QM rules appear to have had little bite in 2014 *relative to 2013*. Since the financial crisis and through 2013, lenders have tightened standards, and most loans have been either GSE eligible or nonconventional; thus, most lending in 2013 may have already met the new ATR, if not QM, standards. Moreover, lenders may have adjusted to the new rules prior to the actual implementation date in 2014, reducing the differences between 2013 and 2014. At the same time, lenders making loans in 2013 that would not have been QM loans under the new rules may have been willing to continue doing so in 2014 despite some added legal risk.

Still, it is important to recognize that we do not know how the market would have evolved in 2014 in the absence of the new rules. Perhaps in their absence, DTI ratios would have risen significantly. In addition, borrowers may have reduced nonmortgage debt, which we do not observe in the HMDA data, in response to the new rules. Thus, we cannot rule out that there was an effect on DTI ratios in 2014 relative to 2013. Furthermore, the ATR and QM rules could have affected other dimensions of the mortgage market that are not observed in the HMDA data, such as the use of low-documentation and interest-only loans. Finally, even if the rules had little effect in 2014, they may become more binding in the future if mortgage lenders and investors regain their appetite for risk.

rowers did come down a little, but, for all home-purchase loans and most other groups in the refinance market, the upper percentiles either stayed the same or increased.

Table 9. Percentiles of estimated front-end debt-to-income ratios, by purpose of loan, 2013-14

Percent										
					Perc	entile				
Characteristic of borrower and of neighborhood			2013					2014		
	50	75	90	95	99	50	75	90	95	99
A. Home purchase										
Borrower race and ethnicity ¹										
Asian	19	24	30	33	38	19	25	30	33	38
Black or African American	18	23	27	30	35	18	23	28	31	36
Hispanic white	19	25	30	32	37	20	26	31	33	38
Non-Hispanic white	16	20	25	28	34	16	21	26	29	34
Other minority ²	18	24	29	32	37	19	24	29	32	38
Joint	15	20	25	28	34	16	20	25	28	34
Missing	16	21	27	30	35	17	22	27	30	35
Borrower income ³										
Low or moderate	20	25	29	32	38	20	25	30	33	38
Middle	17	22	27	30	35	18	22	27	30	35
High	14	18	22	25	31	14	18	23	26	32
Neighborhood income ⁴										
Low or moderate	17	22	28	31	36	18	23	29	32	37
Middle	16	21	26	29	35	17	22	27	30	35
High	16	21	26	29	35	16	21	26	29	35
Income not used or not applicable	15	20	25	28	35	14	19	24	27	35
Memo										
Conventional jumbo loans ⁵	17	23	28	31	38	18	23	28	31	37
All home-purchase loans	16	21	26	29	35	17	22	27	30	35
B. Refinance										
Borrower race and ethnicity ¹	10	01	00		- 4	10		00	00	45
Asian	16	21	28	32	51	18	24	29	33	45
Black or African American	13	19	26	32	51	14	20	26	32	51
Hispanic white	15	22	29	35	51	17	23	30	34	51
Non-Hispanic white	12	17 21	23 29	28	42	13	19 23	25 30	29	42
Other minority ² Joint	15 12	17	29 23	36 27	51 39	16 14	23 19	30 25	34 29	51 39
Missing	12	17	23 25	30	39 48	14	20	25	29 30	39 43
Borrower income ³	13	10	20	30	40	14	20	20	30	43
Low or moderate	18	25	33	42	51	18	25	32	39	51
Middle	10	19	33 24	27	34	15	20	26	29	36
High	14	19	19	22	29	13	17	20	25	30
Neighborhood income ⁴	10	14	15	22	23	12	17	22	25	51
Low or moderate	13	19	26	32	51	14	20	27	32	51
Middle	12	18	24	29	46	14	19	26	30	44
High	12	18	24	28	42	14	20	26	30	41
Income not used or not applicable	13	16	24	26	35	14	17	23	27	36
Memo		10		20	00			20	2.	00
Conventional jumbo loans ⁵	17	23	29	33	43	18	24	29	33	41
All refinance loans	13	18	24	29	46	14	20	26	30	43

Note: First-lien mortgages for one- to four-family, owner-occupied, site-built homes. The data for 2014 are restricted to loans with an application date on or after January 10, 2014. See text for details on how the front-end debt-to-income ratio is estimated.

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 Jumbo loans are loans with amounts in excess of the single-family conforming loan-size limits for eligibility for purchase by the government-sponsored enterprises.

Table 10. Distril Percent except as n		f Hoepa	loans, b	y charac	teristic o	of Ioan, 2	2004–14				
Loans by purpose, lien status, property type, and amount	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
HOEPA loans (total)	24,437	35,985	15,195	10,780	8,577	6,446	3,407	2,373	2,193	1,873	1,262
Loan purpose											
Home purchase	0	0	0	0	0	0	0	0	0	0	31.8
Home improvement	37.7	26.1	42.4	45.4	30.5	31.1	32.6	32.3	31.5	30.1	18.0
Refinance	62.3	73.9	57.6	54.6	69.5	68.9	67.4	67.7	68.5	69.9	50.2
Lien status											
First	55.5	60.5	53.6	52.8	78.5	84.1	83.9	82.8	84.6	84.0	91.6
Junior	44.5	39.5	46.4	47.2	21.5	15.9	16.1	17.2	15.4	16.0	8.4
Property type											
Site built	88.0	91.8	83.7	81.0	72.7	67.8	68.3	65.7	65.7	69.1	75.2
Manufactured home	12.0	8.2	16.3	19.0	27.3	32.2	31.7	34.3	34.3	30.9	24.8
Loan amount											
Less than \$50,000	72.4	48.4	72.1	74.3	66.7	72.5	76.5	77.8	75.6	71.0	53.2
Greater than \$50,000	27.6	51.6	27.9	25.7	33.3	27.5	23.5	22.2	24.4	29.0	46.8

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

HOEPA Loans

Under HOEPA, certain types of mortgage loans that have interest rates or fees above specified levels are subject to additional consumer protections, such as special disclosures and restrictions on loan features. New rules extending HOEPA's protections from refinance and home equity loans to also include home-purchase loans and home equity lines of credit became effective on January 10, 2014. These rules also added new protections for high-cost mortgages, such as a pre-loan counseling requirement for borrowers.

The new rules also changed the benchmark used to identify high-cost loans that are covered by HOEPA's protections. Instead of using the yield on Treasury securities, high-cost loans are identified by comparing a loan's APR with the APOR. HOEPA coverage now applies to first liens with an APR more than 6.5 percentage points above the APOR. If the loan is a junior lien or the loan amount is less than \$50,000 and is secured by personal property (such as a manufactured home), then the high-cost threshold is 8.5 percentage points above the APOR. Prior to 2014, HOEPA's protections were triggered if the loan's APR exceeded 8 percentage points above the rate on a Treasury security of similar term for first liens, and 10 percentage points for junior liens. Finally, under the new rules, HOEPA coverage is also triggered if the points and fees exceed certain thresholds.⁴¹

While HOEPA loans were never a large fraction of the mortgage market, they have become even rarer since the housing boom. In 2005, lenders reported nearly 36,000 HOEPA loans (table 10). In 2014, the total was 1,262 loans, down from 1,873 in 2013 despite the additional coverage of home-purchase loans.

While HOEPA loans were quite rare in 2014, mortgages with an APR near to, but below, the triggering threshold were somewhat more common. Figure 7 plots the frequency of first-lien mortgages for owner-occupied properties against the spread over the APOR in a

⁴¹ Under the new rules, a loan is also considered high cost if the points and fees exceed 5 percent of the total loan amount for a loan equal to or more than \$20,000 and 8 percent of the total loan amount or \$1,000 for a loan less than \$20,000, with the loan amounts adjusted annually for inflation.

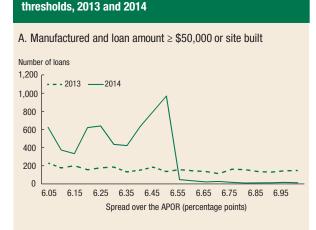
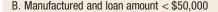
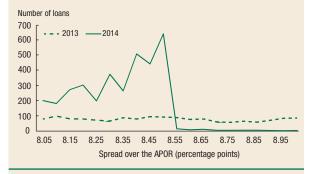


Figure 7. Number of originations near HOEPA spread





Note: The data are annual. First-lien mortgage originations for owner-occupied properties clustered into bins of 0.05 percentage point. The data for 2014 are restricted to loans with an application date on or after January 10, 2014. HOEPA is Home Ownership and Equity Protection Act; APOR is average prime offer rate.

1 percentage point range around the HOEPA triggering threshold. The top panel combines loans of \$50,000 or more for manufactured homes with all loans for site-built homes, as these loans all have a HOEPA threshold of 6.5 percentage points. The bottom panel presents the frequency of loans less than \$50,000 for manufactured homes, which trigger HOEPA protections if the APR is more than 8.5 percentage points above the APOR. In both panels, the values from 2013 are plotted for comparison, as the APOR-based definition of high-cost mortgages was not in use then. In both panels, the 2014 plots are restricted to loans with an application date on or after January 10, 2014, when the new rule went into effect.

Both panels show a precipitous drop in the number of loans originated in 2014 at the HOEPA price threshold, whereas for 2013—before the new threshold rules took effect—no such discontinuity was evident. This pattern suggests that HOEPA discouraged lending above the price thresholds, but the mechanism by which the

market responds to HOEPA is unclear. One possibility is that lenders reduce the APR on their offers to push the loan under the threshold, which would imply a benefit to consumers in the form of a lower price. Another possibility is that, rather than adjusting prices, lenders denied applications they would have accepted in the absence of HOEPA. In this case, consumers may or may not benefit from the law. Finally, prospective borrowers may have chosen to reject high-cost offers when presented with the additional HOEPA disclosures. Further research is needed to understand the relative importance of each of these mechanisms.

Lending Institutions

In 2014, there were 7,062 reporting institutions (table 11). The total consisted of 4,118 banks and thrifts (hereafter, banks), of which 3,367 were small, defined as having assets of less than \$1 billion; 1,984 credit unions; 139 mortgage companies affiliated with depositories (banks and credit unions); and 821 independent mortgage companies.⁴² Banks collec-

⁴² 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 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—

Table 11. Lending activity, by type of	of institution, 2014
Deveent eveent on noted	

	Type of institution ¹								
Institutions and type of activity	Small bank	Large bank	Credit union	Affiliated mortgage company	Independent mortgage company	All			
Number of institutions	3,367	751	1,984	139	821	7,062			
Applications (thousands)	787	3,616	909	501	4,119	9,933			
Originations (thousands)	558	2,161	545	313	2,403	5,980			
Purchases (thousands)	26	1,061	12	172	481	1,752			
Number of institutions with fewer than 100 loans	1,935	149	1,150	38	88	3,360			
Originations (thousands)	79.3	6.7	44.5	1.6	3.4	135.5			
Number of institutions with fewer than 25 loans	667	45	443	16	41	1,212			
Originations (thousands)	8.2	.6	5.2	.2	.5	14.7			
Home-purchase loans (thousands) ²	220	869	172	189	1,288	2,737			
Conventional	73.8	74.3	86.8	58.9	51.9	63.4			
Higher-priced share of conventional loans	11.3	1.7	8.9	1.0	1.5	3.1			
LMI borrower ³	28.9	23.5	26.1	30.1	28.8	27.0			
LMI neighborhood ⁴	11.9	11.8	12.7	12.6	14.7	13.3			
Non-Hispanic white ⁵	81.3	69.9	70.7	71.0	65.9	69.1			
Minority borrower ⁵	11.8	17.8	14.4	16.8	22.6	19.3			
Sold ⁶	70.6	72.7	43.7	97.3	97.6	84.1			
Refinance loans (thousands) ²	119	723	177	86	816	1,921			
Conventional	85.7	90.6	96.4	80.2	69.2	81.3			
Higher-priced share of conventional loans	11.3	1.5	3.5	.8	1.2	2.2			
LMI borrower ³	22.5	23.5	24.6	21.1	20.6	22.2			
LMI neighborhood ⁴	11.3	12.8	13.9	12.0	13.6	13.1			
Non-Hispanic white ⁵	84.2	68.8	71.2	68.3	63.7	67.8			
Minority borrower ⁵	8.2	17.1	14.6	17.1	18.2	16.8			
Sold ⁶	58.0	72.6	29.8	96.4	98.4	79.4			

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 2013. Large banks are all other banks. 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 nonwhite (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.

tively accounted for about 45 percent of all reported mortgage originations; independent mortgage companies, about 40 percent; credit unions, over 9 percent; and affiliates, the remainder.

Many institutions report little activity. About 48 percent of institutions (3,360 out of 7,062) reported fewer than 100 mortgage originations in 2014, accounting for about 136,000 originations, or 2 percent of all originations. About 17 percent of institutions originated fewer than 25 loans, in total accounting for about one-fourth of 1 percent of all originations.

that is, institutions for which the "other lender code" in the Reporter Panel equals 1, 2, or 5. All credit unions report to the National Credit Union Administration except four large credit unions (Boeing Employees Credit Union, Navy Federal Credit Union, Pentagon Federal Credit Union, and State Employees Credit Union), which report to the CFPB.

Table 11 provides several other statistics to help compare the lending patterns of different types of institutions in 2014, and we discuss some highlights here. First, depositories tend to originate a significantly higher fraction of conventional loans than nondepositories. As will be seen in the next section, this difference holds historically as well.

Second, in 2014, small banks and credit unions accounted for a highly disproportionate share of conventional higher-priced loans. Over 11 percent of conventional home-purchase loans for one- to four-family, owner-occupied, site-built properties originated by small banks were higher priced, as were nearly 9 percent of such loans originated by credit unions. In contrast, less than 2 percent of such loans originated by other types of institutions were higher priced. The numbers for both home-purchase and refinance lending imply that, even though small banks and credit unions accounted for less than 18 percent of conventional home-purchase and refinance loans, they originated over 55 percent of conventional higher-priced loans. Interestingly, further analysis indicates that these differences in higher-priced lending hold, on average, even when comparing small banks and credit unions to other lenders operating in the same county.

Notably, under the new QM rules, higher-priced conventional QM loans will have a rebuttable presumption of compliance with the ATR rules, as opposed to a conclusive presumption of compliance (that is, a safe harbor), unless the loan is originated by a small creditor, in which case the safe-harbor APR threshold is 3.5 percentage points over the APOR rather than 1.5 percentage points.⁴³ Many small banks and credit unions may fit the small creditor definition, and over 85 percent of the higher-priced loans originated by these institutions had APOR spreads of less than 3.5 percentage points. Thus, many of these higherpriced loans may have safe-harbor status if they satisfy all of the other QM criteria.

Third, small banks and credit unions are significantly less likely to originate mortgages to minority borrowers, compared with independent mortgage companies, but are more similar to independent mortgage companies in terms of their share of lending to LMI borrowers and neighborhoods. Patterns of lending over time by demographic group and lender type are discussed in detail in a later section.

Fourth, the HMDA data provide information on whether originated loans were sold within the same calendar year and the type of institution to which they were sold, such as one of the GSEs or a banking institution (see appendix A for a full list of purchaser types). Table 11 displays the fraction of loans sold within the calendar year, as opposed to being held in portfolio.⁴⁴ Nondepositories sold virtually all of their loans in 2014. In contrast, credit unions sold less than one-half of the home-purchase loans they originated and less than one-third of the refinance loans they originated. That said, as discussed later, portfolio lending among depositories has declined significantly over time.

Table 12 lists the top 25 reporting institutions according to their total number of originations, along with the same set of lending characteristics as those listed in table 11.⁴⁵ Wells Fargo reported the most originations, with about 374,000. The next-highest total was for Quicken Loans, followed by Bank of America and JPMorgan Chase. Overall, the top 25 lenders accounted for about 34 percent of all loan originations in 2014, down from 41 per-

⁴³ Other criteria must also be met to achieve safe-harbor status, such as holding the loan in portfolio for at least three years.

⁴⁴ 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.

⁴⁵ Some institutions may be part of a larger organization; however, the data in table 12 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.

				Home-purchase loans ²							
Respondent	Institution type ¹	Total origina- tions (thousands)	Total purchases (thousands)	Number (thous- ands)	Con- ven- tional	Higher priced ³	LMI bor- rower ⁴	LMI neigh- bor- hood ⁵	Non- Hispanic white ⁶	Minority borrower ⁶	Sold
Wells Fargo Bank, NA	Large bank	374	448	151	76.2	.2	18.5	11.2	68.0	20.3	74.
Quicken Loans, Inc.	Ind. mort. co.	283	0	46	54.7	.5	26.8	13.1	55.7	13.3	100.
Bank of America, NA	Large bank	162	43	43	80.3	0	019.8	11.7	62.9	27.4	73.
JPMorgan Chase Bank, NA	Large bank	145	218	51	85.7	.7	18.7	11.1	64.0	22.7	62.
U.S. Bank, NA	Large bank	87	106	27	79.4	.4	28.3	11.7	70.9	11.1	75.
Flagstar Bank, FSB	Large bank	82	22	45	58.8	.9	25.1	12.6	66.9	25.5	99.
Citibank, NA	Large bank	72	24	21	95.4	0	11.7	12.9	47.7	30.3	52.
PNC Bank, NA	Large bank	72	0	19	69.8	0	33.7	14.2	62.7	15.2	87
Nationstar Mortgage	Ind. mort. co.	61	27	3	53.0	.1	18.1	15.7	48.7	38.0	99
loanDepot.com	Ind. mort. co.	58	0	17	50.3	.9	17.0	14.9	53.2	31.8	99
Freedom Mortgage Corp.	Ind. mort. co.	58	47	10	54.0	.1	25.3	12.3	66.2	21.8	99
USAA Federal Savings Bank	Large bank	55	0	41	29.1	.1	13.5	9.6	64.1	14.2	92
PrimeLending, A Plainscapital Company	Affiliated mort. co.	48	0	36	57.6	1.2	28.8	13.0	69.0	16.5	99
Branch Banking and Trust Co.	Large bank	47	48	21	70.1	.2	26.4	12.0	69.3	12.1	72
Navy Federal Credit Union	Credit union	47	0	23	41.3	22.6	21.9	12.6	55.4	21.4	47
Stearns Lending, Inc.	Ind. mort. co.	47	16	26	56.7	.7	32.4	16.3	63.8	25.4	98
Regions Bank	Large bank	41	0	16	65.0	3.9	33.3	13.9	72.9	22.8	66
Shore Mortgage	Ind. mort. co.	38	0	19	77.9	1.2	28.5	13.3	63.9	29.5	99
Guild Mortgage Co.	Ind. mort. co.	37	0	26	43.1	2.8	29.8	18.1	67.4	23.3	99
Guaranteed Rate, Inc.	Ind. mort. co.	37	0	24	78.3	.6	22.2	12.5	74.0	14.9	99
SunTrust Mortgage, Inc.	Affiliated mort. co.	35	33	14	85.7	0	20.2	10.0	64.1	16.3	98
Caliber Home Loans, Inc.	Ind. mort. co.	35	16	24	54.6	.5	33.2	16.2	59.5	24.6	100
Stonegate Mortgage Corp.	Ind. mort. co.	29	30	18	45.9	1.6	33.9	13.8	72.0	19.6	99
Franklin American Mortgage Co.	Ind. mort. co.	28	54	19	56.0	1.1	30.3	11.5	80.9	13.8	100
Academy Mortgage Corp.	Ind. mort. co.	28	0	21	42.0	1.0	33.1	16.6	64.8	25.6	99
Top 25 institutions		2,007	1,132	760	65.0	1.0	23.7	12.7	65.1	20.6	84
All institutions		5,980	1,752	2,737	63.4	3.1	27.0	13.3	69.1	19.3	84

¹ See table 11, note 1

² See table 11, note 2.

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 nonwhite (excluding joint or missing) or Hispanic white applicants.

⁷ See table 11, note 6.

... Not applicable.

Source: FFIEC HMDA data; bank asset data drawn from Federal Deposit Insurance Corporation Reports of Condition and Income.

(continued on next page)

cent in 2013. These same firms also purchased over 1 million loans from other lending institutions during 2014 (these loans could have been originated in 2014 or in earlier years).

The top institutions differ significantly in their lending patterns. For example, over 95 percent of Citibank's home-purchase loans were conventional, compared with 29 percent for USAA Federal Savings Bank. Regarding loan sales, Navy Federal Credit Union sold only 47 percent of its home-purchase originations, whereas the average across the top 25 institutions was about 85 percent. Finally, the composition of borrowers varied across the top 25 institutions. For some institutions, one-third or more of home-purchase borrowers were

Percent except as noted												
		Refinance loans ²										
Respondent	Institution type ¹	Number (thous- ands)	Con- ven- tional	Higher priced ³	LMI bor- rowerer ⁴	LMI neigh- bor- hood ⁵	Non- Hispanic white ⁶	Minority borrower ⁶	Sold ⁷			
Wells Fargo Bank, NA	Large bank	137	86.4	.5	19.8	13.2	67.1	19.7	88.2			
Quicken Loans, Inc.	Ind. mort. co.	217	69.2	.3	22.8	12.9	58.5	11.5	100.0			
Bank of America, NA	Large bank	87	93.8	.2	28.9	14.8	63.6	24.0	87.7			
JPMorgan Chase Bank, NA	Large bank	70	90.6	1.4	24.1	13.0	65.9	21.3	80.7			
U.S. Bank, NA	Large bank	38	94.1	3.7	26.6	14.0	62.7	10.0	53.0			
Flagstar Bank, FSB	Large bank	26	77.0	.9	17.6	12.1	67.0	23.3	98.1			
Citibank, NA	Large bank	39	93.4	0	29.3	15.1	61.4	19.0	93.2			
PNC Bank, NA	Large bank	33	87.0	.1	30.8	14.2	67.1	11.6	64.6			
Nationstar Mortgage	Ind. mort. co.	47	88.0	3.1	34.9	18.8	64.0	25.1	99.9			
loanDepot.com	Ind. mort. co.	35	61.1	.9	22.8	14.5	66.1	19.6	100.0			
Freedom Mortgage Corp.	Ind. mort. co.	42	15.6	.1	5.6	15.1	58.2	23.5	99.9			
USAA Federal Savings Bank	Large bank	9	51.6	.1	9.8	10.6	59.8	15.8	69.8			
PrimeLending, A Plainscapital Company	Affiliated mort. co.	7	88.7	1.3	19.8	11.5	74.8	14.5	99.8			
Branch Banking and Trust Co.	Large bank	11	91.4	.5	27.9	13.1	73.7	9.8	58.1			
Navy Federal Credit Union	Credit union	8	40.0	1.3	14.6	11.9	53.5	24.9	55.1			
Stearns Lending, Inc.	Ind. mort. co.	15	84.8	.2	22.1	13.8	64.5	23.4	97.9			
Regions Bank	Large bank	13	94.5	1.2	31.4	15.1	80.2	16.0	30.8			
Shore Mortgage	Ind. mort. co.	14	94.3	.7	19.0	11.4	66.7	25.0	99.5			
Guild Mortgage Co.	Ind. mort. co.	5	82.2	.7	23.5	15.9	71.6	18.5	99.9			
Guaranteed Rate, Inc.	Ind. mort. co.	9	95.1	.3	14.3	10.0	77.7	11.9	99.1			
SunTrust Mortgage, Inc.	Affiliated mort. co.	16	87.6	0	28.2	13.3	66.3	14.9	98.8			
Caliber Home Loans, Inc.	Ind. mort. co.	7	85.0	.1	19.3	12.4	63.9	21.0	99.9			
Stonegate Mortgage Corp.	Ind. mort. co.	8	64.1	.9	17.4	11.5	68.7	17.0	99.6			
Franklin American Mortgage Co.	Ind. mort. co.	7	81.8	.7	22.0	11.3	79.1	14.4	99.9			
Academy Mortgage Corp.	Ind. mort. co.	3	84.4	.4	23.3	11.0	75.5	16.2	99.8			
Top 25 institutions		904	78.9	.8	23.3	13.7	63.9	17.8	89.4			
All institutions		1,921	81.3	2.2	22.2	13.1	67.8	16.8	79.4			

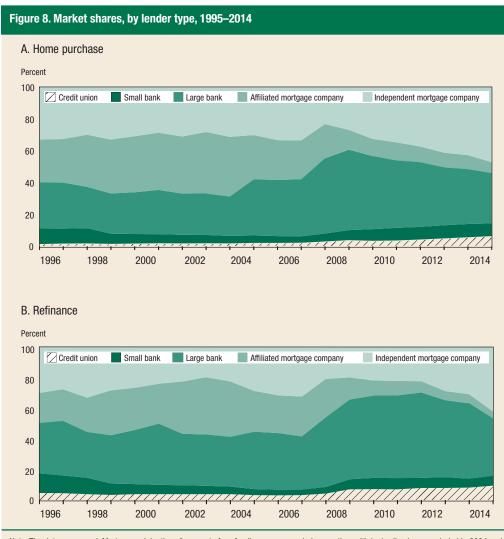
Table 12. Top 25 respondents in terms of total originations, 2014–*continued*

LMI, while at other institutions fewer than 20 percent of borrowers were in that category.⁴⁶ While it is difficult to know precisely why such variation exists, these differences could reflect different business strategies, different customer demands in the markets and geographic regions they serve, or some combination of these two broad factors.

Changes in Market Structure over Time

Over the past two decades or so, several developments have influenced the evolution of the mortgage market. One development has been the emergence of credit scoring and automated underwriting, which has facilitated the growth of secondary markets for mortgages and other consumer loans. Another was bank deregulation in the mid-1990s, which allowed banks to more easily expand across the nation and grow their balance sheets. Finally, the recent mortgage and financial crisis led to the failure of many (major and minor) lenders and ongoing difficulties for some survivors, and it has stimulated new regulations aimed at discouraging risky mortgage lending and limiting the systemic risk posed by the largest financial institutions. The HMDA data, which go back to the early 1990s and disclose the identity of the lender on each mortgage application, allow us to study how the market has

⁴⁶ 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.



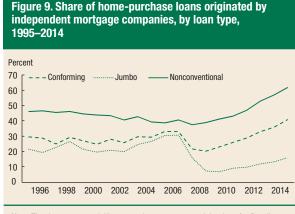
Note: The data are annual. Mortgage originations for one- to four-family owner-occupied properties, with junior-lien loans excluded in 2004 and later. Small banks are part of organizations with less than \$1 billion in assets, measured in 2014 dollars. Large banks are all other banks. Source: FFIEC HMDA data; bank asset data drawn from Federal Deposit Insurance Corporation Reports of Condition and Income.

evolved in response to these and other events. To that end, the remainder of this section documents changes over the past 20 years in the lending activity and market share of the different types of mortgage lenders described earlier.

Figure 8 displays the market shares of the five types of institutions listed earlier in table 11 for home-purchase and refinance loans since 1995, focusing on first-lien mortgages for one-to four-family owner-occupied properties.⁴⁷ The figure panels illustrate the sharply rising share since 2007 of both home-purchase and refinance loans originated by independent mortgage companies.⁴⁸ With the collapse of the housing and secondary mortgage market,

⁴⁷ For historical categorizations of HMDA reporters into lender types, we rely heavily on information provided by Robert B. Avery. Small banks are defined as those having assets (including all institutions in the banking organization) of less than \$1 billion, inflation-adjusted to 2014 dollars.

⁴⁸ HMDA coverage has expanded over time, particularly with the addition of new MSAs and the expansion of existing MSA borders in 2004 and 2014. The trends in market shares over time are essentially unchanged by the restriction of data to counties that have continuously been part of an MSA since 1995 (where HMDA coverage is close to 100 percent).



Note: The data are annual. Home-purchase mortgage originations for first-lien, one- to four-family, owner-occupied properties. Conforming loans have a loan amount below the single-family loan-size limit for eligibility for purchase by a government-sponsored enterprise. For definition of jumbo loans, see table 9, note 5; for definition of nonconventional loans, see table 5, note 1. many independent mortgage companies went out of business, especially those focused on subprime lending, and the market share of this group dropped sharply between 2006 and 2007.⁴⁹ The industry has more than recovered its market share, however, and, in 2014, independent mortgage companies accounted for about 47 percent of home-purchase loans and 42 percent of refinancings, fractions that are higher than at any point in the past 20 years.

The market shares of credit unions have also reached historic highs, though they are still under 10 percent for both home-purchase and

refinance lending. In contrast, large banks have lost significant market share in home-purchase lending since 2008, and nonbank affiliates of depositories, which tend to be owned by the largest banking organizations, have become far less active than they were in the late 1990s and early 2000s. Finally, small banks slowly lost market share from the mid-1990s through 2006 and then rebounded sharply in the next four years. However, since 2010, their share has been mostly flat for home-purchase loans and declined slightly for refinance loans, and both shares stand below what they were in the mid-1990s.

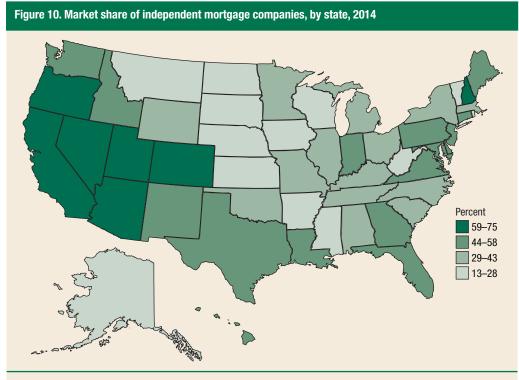
There are a variety of potential explanations for the decline in large banks' share of mortgage originations. One possible cause is the new regulatory environment, with higher capital and liquidity requirements that may be most binding for the largest banks. The largest banks may also have sizable volumes of pre-crisis vintage mortgages in their portfolios (due in part to acquisitions of failed banks), so the reduction in market share could reflect an effort to rebalance their assets. Yet another possibility is that large banks have found more profitable investment opportunities in other markets, whereas monoline mortgage companies will continue to focus on mortgage lending. More research is needed to understand the importance of these and other explanations for the contraction in large banks' mortgage origination activity.

Market Shares by Loan Type and Size

Some reports suggest that the rise of independent mortgage companies is closely tied to nonconventional lending and a willingness to originate riskier loans.⁵⁰ However, the HMDA data indicate that their rise has been broad based across different types of loans and demographic groups. As figure 9 shows, independent mortgage companies have markedly increased their share of conventional conforming, conventional jumbo, and nonconventional home-purchase loans since 2008 (market shares for other lender types and for

⁴⁹ The market share of independent mortgage companies in 2007 may be slightly understated due to the closure of several large lenders that did not submit HMDA data for 2007 even though they made loans during the year prior to their closure. For more information, see Robert B. Avery, Kenneth P. Brevoort, and Glenn B. Canner (2008), "The 2007 HMDA Data," *Federal Reserve Bulletin*, vol. 94 (December), pp. A107–A146, www .federalreserve.gov/pubs/bulletin/2008/articles/hmda/default.htm.

⁵⁰ See, for example, Joe Light (2014), "Nonbank Mortgage Lenders Bounce Back," Wall Street Journal, August 27.



Note: The data are annual. Home-purchase mortgage originations for first-lien, one- to four-family, owner-occupied properties.

refinance loans are shown in tables 13.A and 13.B; for brevity, only selected years are shown in these tables).⁵¹ Furthermore, as discussed in more detail in the next subsection, independent nonbanks have significantly increased their lending to both white and minority borrowers and in lower- and higher-income neighborhoods. All of that said, the rise in lending by independent mortgage companies has not been entirely uniform across the country. Their activity has risen most significantly, on average, in states to the west and southwest, where independent mortgage companies now tend to originate the majority of home-purchase loans (figure 10).

Figure 11 indicates (as do tables 13.A and 13.B) that independent mortgage companies were significantly more likely in 2014 than in 2010 to report selling conventional conforming loans to the GSEs and nonconventional loans into Ginnie Mae–guaranteed securities, suggesting a tighter link between these government-backed secondary-market institutions

⁵¹ A loan qualifies as conforming in tables 13.A and 13.B if the loan amount is below the GSEs' conforming loansize 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 are 50 percent higher than in the nation at large. For the years 2008 and thereafter, designated higher-cost areas have elevated limits. For 2014, the general conforming loan-size limit was \$417,000, and the maximum highcost-area loan-size limit was \$625,000 (and 50 percent higher in Alaska, Hawaii, the U.S. Virgin Islands, and Guam). In tables 13.A, 13.B, 14.A, and 14.B, "jumbo loans" refers to loans above this limit, which are not eligible for sale to the GSEs. Conforming loan-size limits increase with the number of units that make up the property, but the HMDA data do not differentiate between properties with anywhere from one to four units. Some loans in the table may therefore have been misclassified as jumbo despite being eligible for purchase by a GSE.

Prior to 2004, the HMDA data did not distinguish between manufactured and site-built properties and did not provide information on the lien status of the loan. For consistency over time, tables 13.A, 13.B, 14.A, and 14.B include loans for both site-built properties and manufactured homes. However, regarding lien status, the data in tables 13.A, 13.B, 14.A, and 14.B include both first- and junior-lien loans prior to 2004 and first liens only from 2004 onward, as junior liens became highly prevalent in 2005 and 2006.



B. Nonconventional loans securitized with Ginnie Mae guarantee



one- to four-family, owner-occupied properties. GSE is government-sponsored enterprise. Conforming loans have a loan amount below the single-family loansize limit for eligibility for purchase by a GSE. For definition of nonconventional loans, see table 5, note 1.

and nonbank originators.52 For example, in 2014, almost 40 percent of nonconventional home-purchase loans and 78 percent of nonconventional refinancings originated by independent mortgage companies were reported as securitized by the originating institution with Ginnie Mae backing. In 2010, these numbers were only 10 percent for home purchases and 20 percent for refinancings. While banks have reportedly become less willing in recent years to purchase loans originated by nonbanks and bundle them for sale to the GSEs or for creating Ginnie Mae securities, nonbanks appear to have adapted to the new environment by working directly with these agencies.

One potential concern with this tightening link is that, because nonbanks may have less stable sources of financing and less financial oversight than banks, they may be more likely to fail and expose the GSEs and Ginnie Mae to losses.⁵³ However, others have noted that, since the financial crisis, nonbanks are subject to more federal and state oversight than they

once were, and nonbanks have to meet certain financial standards set by the GSEs and Ginnie Mae in order to work with them.⁵⁴

Other interesting patterns over time and across institution types in portfolio and jumbo lending emerge in tables 13.A and 13.B. Financing for conventional jumbo loans contracted with the collapse in the private-label mortgage-backed securities market. Conforming loan limits increased for higher-cost areas in 2008 while house prices generally fell, further reducing the pool of potential jumbo loans. There were only 36,000 conventional home-purchase jumbo loans in 2010, down from a pre-crisis peak of 614,000 such loans in 2005. In 2014, this number had risen again to 132,000 loans but continued to rely heavily

⁵² The HMDA data understate the true share of loans ultimately sold to the GSEs or into pools backed by Ginnie Mae, because many loans are first sold by the originator to another bank or mortgage bank, which then sells or securitizes them. In these cases, the loans are not likely to be reported as sold to the GSEs or into a Ginnie Mae security.

⁵³ See Federal Housing Finance Agency, Office of Inspector General (2014), Recent Trends in the Enterprises' Purchases of Mortgages from Smaller Lenders and Nonbank Mortgage Companies (Washington: FHFA, July), www.fhfaoig.gov/AuditsAndEvaluations/RecentTrendsEnterprises. Also see Kate Berry (2015), "Ginnie Mae's Quandary: Scant Resources to Police Nonbanks," National Mortgage News, April 22, www .nationalmortgagenews.com/news/servicing/ginnie-maes-quandary-scant-resources-to-police-nonbanks-104 9380-1.html.

⁵⁴ See Marshall Lux and Robert Greene (2015), "What's Behind the Non-Bank Mortgage Boom?" MRCBG Associate Working Paper Series 42 (Cambridge, Mass.: Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School, June), www.hks.harvard.edu/centers/mrcbg/publications/awp/awp42.

Loans by type, lender, and purchaser	1995	2000	2005	2010	2012	2013	2014
All loans (in thousands)	3,112	4,375	4,964	2,218	2,343	2,680	2,804
Small bank	9.7	5.7	4.3	7.9	8.3	8.4	8.1
Large bank	28.9	27.8	35.3	42.4	36.3	34.4	31.5
Credit union	1.5	1.9	2.1	3.7	4.9	5.7	6.4
Affiliated mortgage company	26.9	35.9	25.0	11.4	9.3	8.6	6.8
Independent mortgage company	33.0	28.6	33.3	34.7	41.3	42.9	47.2
Conventional conforming loan (in thousands)	2,199	3,082	3,912	1,014	1,229	1,569	1,65
Small bank	11.2	6.8	4.6	10.7	10.8	10.3	9.9
Portfolio	72.2	69.7	50.2	48.2	42.0	40.9	40.6
Sold (GSE)	14.6	11.0	12.8	19.6	23.0	22.9	23.9
Large bank	33.4	31.3	34.6	45.7	39.3	37.2	33.8
Portfolio	61.0	52.9	23.7	23.2	25.5	25.6	26.2
Sold (GSE)	22.2	28.5	36.7	58.3	60.8	59.7	58.2
Credit union	1.9	2.4	2.5	7.0	8.1	8.2	9.0
Portfolio	80.9	78.8	61.5	53.3	52.6	54.6	60.5
Sold (GSE)	7.9	12.5	26.2	31.6	35.9	32.7	27.6
Affiliated mortgage company	23.9	34.5	25.1	10.5	8.7	8.1	6.4
Portfolio	14.3	14.0	10.4	10.4	2.2	1.9	3.3
Sold (GSE)	57.4	44.7	45.1	51.4	46.3	53.1	55.
Independent mortgage company	29.6	24.8	33.1	26.0	33.1	36.1	40.9
Portfolio	12.4	10.6	10.4	13.1	9.5	7.4	6.4
Sold (GSE)	45.7	39.4	9.8	21.7	33.4	42.4	50.
Conventional jumbo loan (in thousands) ¹	183	329	614	36	67	105	13
Small bank	6.9	4.0	1.8	6.6	5.4	4.7	4.
Portfolio	82.2	80.4	59.5	92.6	89.7	85.8	79.
Large bank	41.7	44.6	42.3	69.3	75.6	74.2	71.
Portfolio	85.8	80.2	42.3	95.4	96.7	92.4	92.
Credit union	.8	1.4	.8	4.3	3.6	4.6	4.9
Portfolio	87.3	86.5	83.6	89.9	85.0	92.2	91.
Affiliated mortgage company	29.1	31.4	24.4	13.5	6.8	5.8	4.0
Portfolio	32.7	21.9	15.1	43.9	18.7	12.7	20.
Independent mortgage company	21.5	18.6	30.7	6.3	8.6	10.8	14.4
Portfolio	18.8	16.9	8.4	26.5	9.3	9.8	11.
Nonconventional loan (in thousands) ²	729	963	438	1,168	1,047	1,007	1,01
Small bank	5.7	3.0	4.4	5.4	5.5	5.7	5.
Sold (Ginnie Mae)	11.3	6.1	1.4	2.2	3.1	3.3	5.
Large bank	12.2	10.8	31.5	38.6	30.2	26.0	22.
Sold (Ginnie Mae)	41.2	42.7	46.1	61.8	69.9	68.8	66.8
Credit union	.4	.5	.5	.8	1.3	1.7	2.3
Sold (Ginnie Mae)	37.7	50.8	1.9	23.2	36.9	52.3	48.
Affiliated mortgage company	35.5	41.6	24.8	12.0	10.0	9.7	7.
Sold (Ginnie Mae)	55.8	62.2	54.9	22.6	18.0	22.9	36.0
Independent mortgage company	46.1	43.9	38.8	43.2	53.0	57.0	61.8
Sold (Ginnie Mae)	29.7	37.3	12.9	10.1	22.5	30.9	39.

Note: First-lien mortgages for one- to four-family, owner-occupied, site-built homes for 2005 and after. Mortgages for one- to four-family owner-occupied homes for 1995 and 2000. Rows may not sum to 100 because of rounding. 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 2013. Large banks are all other banks. GSE is government-sponsored enterprise.

¹ See table 9, note 5.

² See table 5, note 1.

Source: FFIEC HMDA data; bank asset data drawn from Federal Deposit Insurance Corporation Reports of Condition and Income.

on portfolio lending. In contrast to conforming loans, large banks accounted for 72 percent of jumbo loans in 2014, sharply higher than their 42 percent share in 2005, and over 90 percent of these loans were held in portfolio.

Table 13. Distribution of lender and purchaser type, by purpose and type of loan, 1995–2014 B. Refinance

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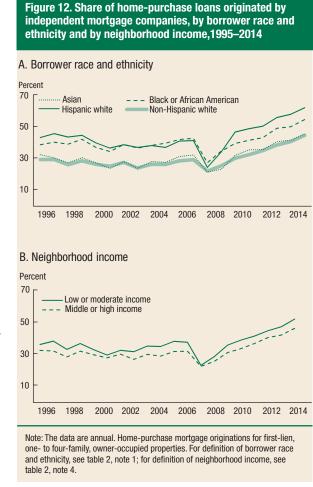
Loans by type, lender, and purchaser	1995	2000	2005	2010	2012	2013	2014
All loans (in thousands)	1,437	2,235	5,770	4,516	5,930	4,385	1,95
Small bank	12.7	6.0	3.6	7.3	7.1	5.8	6.4
Large bank	33.0	40.2	37.1	54.1	50.4	49.3	37.6
Credit union	4.5	3.7	3.0	6.9	7.7	8.0	9.3
Affiliated mortgage company	19.6	26.0	24.7	9.5	5.9	5.7	4.5
Independent mortgage company	30.1	24.1	31.7	22.2	28.9	31.2	42.3
Conventional conforming loan (in housands)	1,238	2,052	4,962	3,790	4,872	3,529	1,49
Small bank	14.0	6.3	3.9	7.9	7.7	6.4	6.9
Portfolio	73.8	76.1	52.2	27.7	24.5	32.0	50.0
Sold (GSE)	14.8	9.1	14.9	34.4	38.9	33.6	23.9
Large bank	34.3	40.6	36.4	56.2	52.5	51.0	40.3
Portfolio	66.4	74.3	28.8	13.1	15.0	19.0	24.9
Sold (GSE)	24.4	13.3	34.5	63.9	72.0	65.9	62.
Credit union	5.0	3.9	3.3	7.9	8.9	9.3	11.3
Portfolio	88.2	89.0	71.1	55.2	56.2	59.6	71.
Sold (GSE)	4.3	4.7	17.9	33.2	33.6	30.8	18.
Affiliated mortgage company	18.2	25.4	25.1	9.6	5.9	5.4	4.
Portfolio	17.3	36.3	20.3	5.5	1.5	1.7	3.
Sold (GSE)	61.8	30.0	42.5	67.7	63.7	67.4	68.
Independent mortgage company	28.4	23.8	31.2	18.4	25.0	27.9	37.
Portfolio	30.0	17.2	7.4	3.2	1.7	1.6	1.
Sold (GSE)	34.6	17.8	7.5	26.0	53.8	67.7	74.
Conventional jumbo loan (in thousands)	104	118	649	70	131	131	83
Small bank	6.1	4.0	1.5	4.5	3.8	3.6	4.
Portfolio	76.4	78.4	42.0	87.3	84.5	83.2	83.4
Large bank	40.2	48.0	43.1	69.7	77.9	74.1	70.
Portfolio	84.5	79.9	39.2	94.5	96.4	88.2	91.4
Credit union	.9	1.2	1.2	5.0	4.0	4.7	5.
Portfolio	90.2	86.1	84.1	93.6	92.1	93.0	90.4
Affiliated mortgage company	30.6	27.1	22.0	14.9	5.6	4.6	3.
Portfolio	33.4	22.2	17.5	53.4	21.4	12.5	27.
Independent mortgage company	22.1	19.7	32.3	5.9	8.6	13.0	17.
Portfolio	30.6	16.2	7.5	28.3	8.6	8.5	7.
Nonconventional loan (in thousands)	95	65	158	655	927	725	368
Small bank	4.0	2.2	1.4	4.2	4.5	3.4	4.
Sold (Ginnie Mae)	21.1	2.4	.9	1.8	6.1	4.3	4.
Large bank	7.8	13.0	33.4	40.5	35.3	36.9	19.0
Sold (Ginnie Mae)	50.2	66.2	59.4	69.0	82.2	88.2	85.
Credit union	.9	.3	.3	1.0	2.1	2.3	1.8
Sold (Ginnie Mae)	52.9	21.8	14.0	61.0	67.7	74.7	58.2
Affiliated mortgage company	26.5	44.0	20.1	8.3	6.0	7.1	4.8
Sold (Ginnie Mae)	71.2	70.8	60.5	35.9	41.9	55.3	62.3
Independent mortgage company	60.8	40.5	44.8	46.0	52.1	50.4	69.8
Sold (Ginnie Mae)	37.2	30.2	5.4	20.4	52.3	64.4	78.

Regarding conventional conforming loans, among depositories, small banks and credit unions have always been more likely than large banks to hold loans in portfolio. However, across all institutions, portfolio lending is far less common than it was in the 1990s and early 2000s. In 1995, small banks held nearly three-fourths of the conventional conforming loans they originated, large banks held over 60 percent, and credit unions held over 80 percent; in 2014, those numbers decreased to about 41 percent, 26 percent, and 60 percent, respectively.

Market Shares by Demographic Group

For the past 20 years, the overall market shares of the different lender types have followed similar trends across demographic groups, even for those groups that account for a relatively small proportion of total lending. Nevertheless, a number of significant differences between various groups have persisted, and a few group-specific deviations from the broader trends have occurred.

As figure 12 shows, black and Hispanic white borrowers have generally obtained a greater share of their loans from independent mortgage companies than Asian and non-Hispanic white borrowers, particularly in recent years (tables 14.A and 14.B provide-for homepurchase and refinance loans, respectively-the market shares of all five lender types by borrower demographic group). Between 1995 and 2006, the independent mortgage company share of home-purchase loans was fairly constant for all four groups: on average, just



under 30 percent for Asian and non-Hispanic white borrowers and just above 40 percent for black and Hispanic white borrowers. Following the financial crisis, these shares increased substantially for all groups and have risen in parallel since 2009.

Independent mortgage companies also tend to have a higher market share in LMI neighborhoods than in non-LMI neighborhoods. In every year since 1995, the independent nonbank share of home-purchase mortgages to borrowers residing in LMI tracts has exceeded that to borrowers in middle- and high-income tracts, with an average difference of about 4.5 percentage points. This difference has held steady as the share of loans originated by independent mortgage companies has increased since 2007. In the refinance market, differences between the distributions of lender shares by neighborhood income have decreased (as shown in table 14.B). Prior to 2007, the independent mortgage company share of refinance loans within low-income tracts was 8.5 percentage points higher than in middle- and high-income tracts. Since 2010, the differences in market share for all lender types have been less than 2 percentage points.

Changing Market Structure and the Community Reinvestment Act

The CRA, passed in 1977, aims to help ensure that the credit needs of LMI communities are being met. To that end, the CRA directs the federal banking regulatory agencies, including the Federal Reserve, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency, to use their supervisory authority to encourage

Table 14. Distribution of lender type, by borrower race and ethnicity, neighborhood income, and purpose of loan, 1995–2014

A. Home purchase	
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Percent except as noted							
Loans by characteristic of borrower and of neighborhood, and by lender type	1995	2000	2005	2010	2012	2013	2014
All loans (thousands)	3,112	4,375	4,964	2,218	2,343	2,680	2,804
Asian borrower ¹							
All loans (thousands)	86	155	245	120	121	149	149
Large bank	34.2	39.7	38.7	46.4	42.9	42.0	39.6
CRA share	81.3	73.1	53.9	76.9	75.7	77.0	74.0
Small bank	6.0	3.2	1.9	4.5	5.1	5.4	4.6
CRA share	71.7	64.3	55.8	58.6	58.3	58.8	53.7
Credit union	0.9	1.5	1.1	2.4	3.2	3.9	4.9
Affiliated mortgage company	26.3	31.7	26.8	11.0	8.0	7.0	5.0
Independent mortgage company	32.6	23.9	31.4	35.6	40.9	41.8	45.8
Black or African American borrower ¹							
All loans (thousands)	216	279	376	134	120	128	147
Large bank	25.5	21.0	28.5	37.0	31.1	29.1	25.5
CRA share	76.5	66.5	37.4	70.2	70.6	69.8	66.9
Small bank	5.1	3.2	1.8	6.5	6.1	6.3	6.2
CRA share	75.0	65.7	59.3	46.7	51.8	51.0	42.0
Credit union	0.8	0.9	1.2	2.3	3.4	4.7	5.6
Affiliated mortgage company	29.6	40.0	26.2	12.4	10.1	9.6	7.7
Independent mortgage company	39.0	34.6	42.3	41.8	49.4	50.4	55.0
Hispanic white borrower ¹							
All loans (thousands)	195	345	515	180	180	194	220
Large bank	26.4	24.3	29.6	34.1	30.3	27.4	24.3
CRA share	80.6	71.4	49.7	76.7	76.7	76.4	72.9
Small bank	6.5	2.7	1.5	4.5	4.2	4.4	4.2
CRA share	81.4	73.5	66.5	59.9	60.0	61.5	55.9
Credit union	0.6	0.8	0.8	1.9	2.8	3.4	3.8
Affiliated mortgage company	22.9	35.2	26.9	10.3	6.4	6.5	5.2
Independent mortgage company	43.5	36.8	41.2	49.1	56.3	58.3	62.5
Non-Hispanic white borrower ¹							
All loans (thousands)	2,371	2,897	3,084	1,504	1,638	1,879	1,934
Large bank	30.2	29.5	37.8	42.8	36.7	34.8	32.0
CRA share	75.3	66.0	51.7	67.4	69.7	69.7	67.1
Small bank	11.0	7.4	5.9	9.4	9.8	9.8	9.6
CRA share	77.3	75.0	70.9	63.9	61.9	61.6	58.5
Credit union	1.6	2.0	2.5	4.0	5.3	5.8	6.5
Affiliated mortgage company	27.8	35.7	25.2	11.2	9.5	8.7	7.0
Independent mortgage company	29.5	25.2	28.7	32.6	38.8	40.9	44.9
Low- or moderate-income neighborhood	2						
All loans (thousands)	316	526	752	269	302	344	377
Large bank	27.0	26.5	31.4	40.5	34.1	31.2	27.8
CRA share	79.0	67.2	48.8	71.7	73.0	73.0	69.8
Small bank	8.8	4.7	3.0	7.1	7.6	7.7	7.3
CRA share	85.5	76.8	71.1	62.0	63.8	63.2	57.7
Credit union	1.2	1.2	1.6	3.2	4.8	5.6	6.1
Affiliated mortgage company	26.5	37.8	25.7	10.1	8.5	8.0	6.4
Independent mortgage company	36.4	29.7	38.4	39.2	45.0	47.5	52.4
Middle- or high-income neighborhood ²							
All loans (thousands)	2,300	3,738	4,159	1,925	2,026	2,322	2,417
Large bank	26.7	28.7	36.4	43.0	36.8	35.1	32.2
CRA share	76.7	66.2	50.6	68.8	70.2	70.2	67.4
Small bank	9.3	5.5	4.4	7.9	8.1	8.3	8.1
CRA share	79.7	74.2	69.5	62.0	62.6	61.7	58.0
Credit union	1.5	1.8	2.1	3.7	4.9	5.6	6.3
Affiliated mortgage company	29.8	35.9	25.1	11.7	9.4	8.8	6.9
Independent mortgage company	32.6	27.9	31.9	33.8	40.7	42.3	46.5

Note: First-lien mortgages for one- to four-family, owner-occupied, site-built homes for 2005 and after. Mortgages for one- to four-family owner-occupied homes for 1995 and 2000. Community Reinvestment Act (CRA) share refers to the fraction of loans originated in a county in which the originating bank operates a branch office. 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 2013. Large banks are all other banks.

¹ See table 2, note 1.

² See table 2, note 4.

Source: FFIEC HMDA data; bank asset data drawn from Federal Deposit Insurance Corporation Reports of Condition and Income.

of loan, 1995–2014							
B. Refinance							
Percent except as noted							
Loans by characteristic of borrower and of neighborhood, and by lender type	1995	2000	2005	2010	2012	2013	2014
All loans (thousands) Asian borrower	1,437	2,235	5,770	4,516	5,930	4,385	1,950
All loans (thousands)	34	41	168	232	327	203	84
Large bank	36.4	46.5	45.1	55.7	47.6	49.1	40.8
CRA share	82.8	76.3	59.9	75.7	69.3	73.4	73.8
Small bank	4.9	2.4	1.5	3.9	3.1	2.7	2.6
CRA share	75.0	66.5	45.1	35.2	47.9	45.6	42.3
Credit union Affiliated mortgage company	2.5 21.7	3.1 25.3	1.9 23.5	3.7 9.5	4.2 5.5	5.3 5.1	6.4 4.2
Independent mortgage company	34.4	23.3	23.5	9.5 27.2	39.5	37.7	4.2
Black or African American borrower	01.1	22.0	20.0	27.2	00.0	01.1	10.1
All loans (thousands)	82	151	476	130	198	194	103
Large bank	27.1	32.6	32.2	52.6	53.9	51.2	34.7
CRA share	84.6	57.7	42.7	71.2	69.3	71.3	71.1
Small bank	6.9	3.1	1.4	4.5	3.6	3.1	4.5
CRA share	78.9	61.6	59.4	53.9	48.0	48.7	40.4
Credit union	4.1	2.3	2.1	6.8	7.2	7.3	8.5
Affiliated mortgage company	17.6	30.3	27.0	9.0	5.2	5.4	4.5
Independent mortgage company	44.1	31.7	37.3	27.2	30.1	33.0	47.9
Hispanic white borrower All loans (thousands)	61	119	492	135	229	219	120
Large bank	36.6	35.8	36.8	54.1	55.5	53.1	39.8
CRA share	91.0	71.8	62.1	81.3	81.5	83.2	81.0
Small bank	8.8	2.1	1.0	3.0	2.6	2.1	2.2
CRA share	84.6	65.3	60.8	57.8	48.5	51.3	48.4
Credit union	3.3	2.3	1.5	7.1	6.8	6.8	8.9
Affiliated mortgage company	16.1	26.4	22.9	10.2	5.4	5.1	5.0
Independent mortgage company	35.1	33.3	37.9	25.5	29.6	33.0	44.1
Non-Hispanic white borrower							
All loans (thousands)	1,081	1,354	3,529	3,360	4,304	3,095	1,326
Large bank	34.2	41.2	38.7	53.4	50.1	49.1	38.1
CRA share	83.6	69.0	53.7	71.6	68.4	69.1	69.8
Small bank CRA share	15.1 82.0	8.7 78.7	5.0 73.3	8.6 68.8	8.5 64.8	7.1 64.5	7.9 62.4
Credit union	4.7	4.4	73.3 3.4	7.0	8.0	8.3	9.7
Affiliated mortgage company	21.1	24.9	25.5	9.4	6.1	5.7	4.5
Independent mortgage company	24.8	20.7	27.4	21.6	27.3	29.8	39.7
Low- or moderate-income neighborhood							
All loans (thousands)	153	340	953	325	602	532	257
Large bank	28.4	35.9	33.4	53.1	52.3	49.6	36.6
CRA share	84.6	59.4	53.5	74.1	70.1	72.2	72.8
Small bank	10.4	4.6	2.5	6.7	5.6	4.7	5.6
CRA share	88.9	75.2	70.3	70.3	66.3	64.8	63.2
Credit union	4.3	2.3	2.3	7.7	8.1	8.2	9.8
Affiliated mortgage company	15.8	28.3	23.9	8.6	5.1	5.1	4.1
Independent mortgage company Middle- or high-income neighborhood	41.0	28.9	37.8	23.9	28.9	32.5	43.9
All loans (thousands)	1,061	1,845	4,783	4,160	5,303	3,841	1,687
Large bank	31.7	41.9	38.1	54.4	50.4	49.5	37.8
CRA share	84.1	64.8	53.0	72.1	68.4	69.8	70.3
Small bank	11.8	5.7	3.7	7.2	7.	5.8	6.4
CRA share	84.8	76.3	70.9	66.3	64.8	63.2	59.7
Credit union	4.4	3.5	3.0	6.7	7.6	7.9	9.1
Affiliated mortgage company	22.1	25.8	24.9	9.6	6.1	5.8	4.6
Independent mortgage company	29.9	22.9	30.3	22.1	29.0	31.0	42.1

Table 14. Distribution of lender type, by borrower race and ethnicity, neighborhood income, and purpose of loan, 1995–2014

Note: See notes to table 14.A.

insured depository institutions to help meet the credit needs of all segments of their local communities—those areas where banking institutions have a physical branch office presence and take deposits (their CRA assessment areas)—including LMI areas.

At the time of the CRA's enactment, federally insured banking institutions dominated mortgage lending and held nearly three-fourths of mortgage debt.⁵⁵ Because the CRA applies only to banks and focuses in particular on banks' assessment areas, shifts in lending activity away from banks and their assessment areas may weaken the CRA as a tool for communities to help ensure financial institutions are making credit available and doing so in a safe and sound manner.⁵⁶ Indeed, the CRA provides community groups with opportunities to provide feedback to bank regulators on the CRA performance of local banks during CRA exams and to protest expansion activities of banks on CRA grounds. Research has found that, during the housing boom, higher-priced lending and mortgage delinquencies were much more prevalent among loans originated by independent mortgage companies and by banks outside of their assessment areas compared with bank loans within their assessment areas.⁵⁷

The analysis thus far indicates that non-CRA-covered institutions—credit unions and independent mortgage companies—now account for a historically large share of mortgage lending, and their share of lending to certain groups, such as Hispanics, is especially high. Now we examine trends in the assessment-area share of loans made by banks (not including loans originated by their nonbank subsidiaries, which tend to be outside banks' assessment areas). In particular, figure 13 presents assessment-area shares of home-purchase loans over time, separately for small and large banks, by race and ethnicity and by neighborhood income. For this analysis, we define a bank's CRA share as the fraction of loans originated within counties where the bank has at least one branch office.

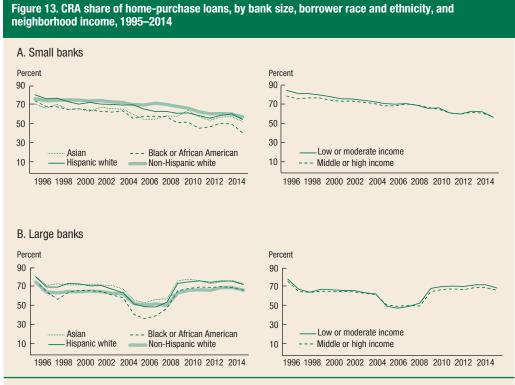
For small banks, there has been a persistent decline in the within-assessment-area share of their home-purchase lending for each group examined, although the decline appears some-what more pronounced for loans going to black borrowers and in LMI neighborhoods. As of 2014, the share of loans originated by small banks within their assessment areas was between 50 and 60 percent for all groups, except for loans to black borrowers, for which the assessment-area share was closer to just 40 percent.

In contrast, large banks' share of lending within their assessment areas declined sharply from 2004 through 2007, especially for black borrowers, but since 2008 it has risen back to levels that are comparable with those in pre-2004 years. At close to 70 percent for all groups in 2014, the assessment-area shares of home-purchase lending by large banks tend now to exceed the shares for small banks.

⁵⁵ See Robert B. Avery, Marsha J. Courchane, and Peter M. Zorn (2009), "The CRA within a Changing Financial Landscape," in Prabal Chakrabarti, David Erickson, Ren S. Essene, Ian Galloway, and John Olson, eds., "Revisiting the CRA: Perspectives on the Future of the Community Reinvestment Act," special issue, *Community Development Investment Review*, vol. 4 (February), pp. 30–46, www.frbsf.org/community-development/files/ revisiting_cra.pdf.

⁵⁶ The CRA does not focus solely on mortgage lending, but mortgage lending has been a historically important component in the evaluation of banks' CRA performance.

⁵⁷ See Robert B. Avery and Kenneth P. Brevoort (2015), "The Subprime Crisis: Is Government Housing Policy to Blame?" *Review of Economics and Statistics*, vol. 97 (May), pp. 352–63. Also see Bhutta and Canner, "Mortgage Market Conditions and Borrower Outcomes," in note 37.



Note: The data are annual. First-lien mortgages for one- to four-family, owner-occupied, site-built homes. Community Reinvestment Act (CRA) share refers to the fraction of loans originated in a county in which the originating bank operates a branch office. Small banks are part of organizations with less than \$1 billion in assets, measured in 2014 dollars. Large banks are all other banks. For definition of borrower race and ethnicity, see table 2, note 1; for definition of neighborhood income, see table 2, note 4.

Source: FFIEC HMDA data; bank asset data drawn from Federal Deposit Insurance Corporation Reports of Condition and Income.

Appendix A: Requirements of Regulation C

Regulation C requires lenders to report the following information on home-purchase and home-improvement loans and on refinancings:

For each application or loan

- application date and the date an action was taken on the application
- action taken on the application
 - approved and originated
 - approved but not accepted by the applicant
 - denied (with the reasons for denial—voluntary for some lenders)
 - withdrawn by the applicant
 - file closed for incompleteness
- preapproval program status (for home-purchase loans only)
 - preapproval request denied by financial institution
 - preapproval request approved but not accepted by individual
- loan amount
- loan type
 - conventional
 - insured by the Federal Housing Administration
 - guaranteed by the Department of Veterans Affairs
 - backed by the Farm Service Agency or Rural Housing Service
- lien status
 - first lien
 - junior lien
 - unsecured
- loan purpose
 - home purchase
 - refinance
 - home improvement
- type of purchaser (if the lender subsequently sold the loan during the year)
 - Fannie Mae
 - Ginnie Mae
 - Freddie Mac
 - Farmer Mac
 - private securitization
 - commercial bank, savings bank, or savings association
 - life insurance company, credit union, mortgage bank, or finance company
 - affiliate institution
 - other type of purchaser

For each applicant or co-applicant

- race
- ethnicity
- sex
- income relied on in credit decision

For each property

- location, by state, county, metropolitan statistical area, and census tract
- type of structure
 - one- to four-family dwelling
 - manufactured home
 - multifamily property (dwelling with five or more units)
- occupancy status (owner occupied, non-owner occupied, or not applicable)

For loans subject to price reporting

- spread above comparable Treasury security for applications taken prior to October 1, 2009
- spread above average prime offer rate for applications taken on or after October 1, 2009

For loans subject to the Home Ownership and Equity Protection Act

• indicator of whether loan is subject to the Home Ownership and Equity Protection Act