FHA LENDING PATTERNS NATIONALLY AND IN THE THIRD DISTRICT STATES

A Special Report by the Community Development Studies and Education Department

Federal Reserve Bank of Philadelphia

FHA LENDING PATTERNS

NATIONALLY AND IN THE THIRD DISTRICT STATES

By

John Wackes

with

Harriet Newburger

November 2011

The views expressed here are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

ACKNOWLEDGMENTS

Many people have contributed to these reports. In particular, we would like to thank Christian Lepore and Michael Zavarello for preparing the reports for the web; Dede Myers, Bob Hunt, and Erin Mierzwa for their helpful comments and suggestions; and Roberta Nicholson for preparing the reports for print. In addition, we would like to acknowledge Sally Burke's work in providing valuable insights and essential editing for both reports.

INTRODUCTION

This publication contains two special reports about the Federal Housing Administration (FHA) prepared by the Community Development Studies and Education Department.

The first report, “FHA Lending Activity in the Past Decade: A National Overview,” compares patterns in mortgage lending in the United States for the FHA program to those for the overall mortgage market from 2000 to 2009. It examines patterns in both home purchase and home refinance activity.

The second report, “The Quality of FHA Lending in Pennsylvania, New Jersey, and Delaware,” provides information on the quality and performance of recent FHA borrower cohorts in 2006, 2007, 2008, and 2009, both nationally and in the Third District states of Pennsylvania, New Jersey, and Delaware. The credit score at the time of loan origination is used as a measure of borrower quality, while loan status at the one-year point is used as an indicator of loan performance.

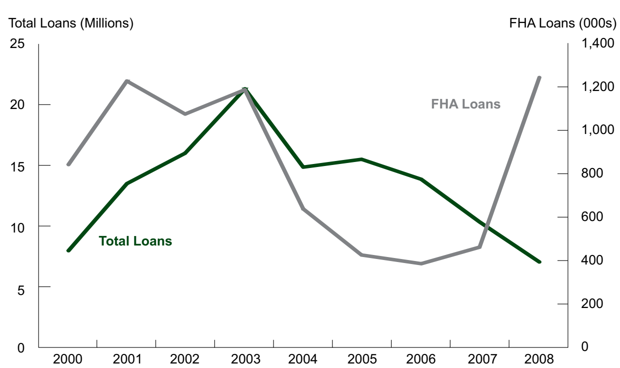
Together, these two reports provide useful background for gauging the FHA’s activity over the past decade and how the FHA has changed relative to the overall mortgage market, both in the nation and in the Third District states.

FHA LENDING ACTIVITY IN THE PAST DECADE: A NATIONAL OVERVIEW

The Federal Housing Administration (FHA), which provides insurance for residential mortgage loans, was established by the National Housing Act of 1934 to stimulate housing demand and, in turn, demand for those who build housing. In the housing boom after World War II, FHA loans helped make mortgage credit more widely available to returning veterans. In recent decades, the FHA, which is now part of the Department of Housing and Urban Development (HUD), has disproportionately served first-time homebuyers as well as low- and moderate-income (LMI) and minority households. The FHA allows low down payments and a low minimum credit score and requires that lenders who make FHA-insured loans carry out extensive loss mitigation efforts on seriously delinquent loans to reduce the incidence of foreclosure.

The annual number of FHA loans has waxed, waned, and waxed again over the period 2000-2009 (Chart 1). As the FHA has grown in size and scope during the years of the current housing crisis, use of FHA loans has become an interesting topic for exploration. This report will compare patterns in lending in the United States for the FHA and the overall mortgage market, which will provide a basis for a better understanding of the factors underlying both the FHA's recent history and its current role in mortgage finance.

Chart 1
Total Loans and FHA Loans, by Total Number, 2000 to 2009



Source: HMDA

Over the past decade, a range of factors have affected the FHA, including changes to its required minimum down payment, an increase in loan limits, and changes to its policies allowing the use of nonprofit organizations as pass-throughs for seller-financed down payment funds. Other factors such as interest rates, home prices, and subprime lending have also affected the lending environment of this time period and have influenced trends in the overall market as well as for the FHA. (See *A Brief Note on the Lending Environment* on page 6.) With the passage of financial reform and the discussion about the role of the government-sponsored entities (GSEs) in the future, the FHA may undergo additional changes as well.

As the FHA has grown in relative market share and size, concerns have grown as well over the program's viability. Increased delinquencies have led to a decline in the program's capital reserves. While an in-depth examination of the financial condition of the FHA program is beyond the scope of this report, the subsequent section beginning on page 19 provides information on the quality and performance of recent FHA borrower cohorts.

Data Source

The data for this national examination come from the Home Mortgage Disclosure Act (HMDA) database. While the HMDA database does not contain information on all mortgage originations, it covers the large majority;[1] among those databases containing information on mortgage originations, it is particularly well-suited for providing time series data on lending volume for the FHA and for the mortgage market as a whole and for the FHA's market share.[2]

[1] For a complete discussion of HMDA reporting requirements, see the publication by the Federal Financial Institutions Examination Council, "Who Reports HMDA Data?" (Washington, D.C., 2010); available at http://www.ffiec.gov/hmda/reporter.htm.

[2] Similar statistics calculated from other databases would not be expected to be exactly the same, although the same trends would be evident.

A Brief Note on the Lending Environment

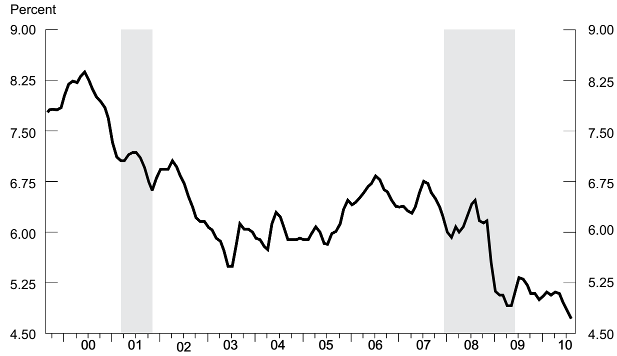
During the 2000-2009 period, overall mortgage lending and mortgage loan performance were, unsurprisingly, influenced by a range of factors external to the FHA itself. We note three factors of particular importance in understanding FHA lending patterns and how these patterns differed from those of the overall mortgage market over the period in question.[a]

Interest rates. As shown in Chart 2, interest rates have been relatively low during the decade in contrast to previous periods. Rates were particularly low in 2003 as a result of Federal Reserve actions in response to the recession in the early years of the decade, and since mid-2008, when the Fed took action in response to the poor economic conditions of the last few years.

Home prices. As shown by the Case-Shiller home price index (Chart 3), house prices increased sharply for much of the period and then, beginning in the third quarter of 2006, declined sharply, an indication of the onset of the housing crisis.

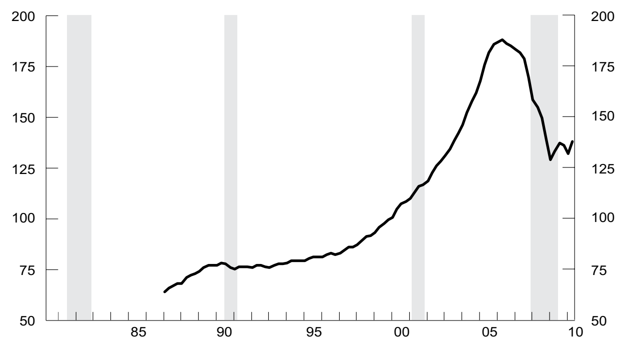
Subprime lending.[b] The pattern of subprime lending during the decade provides a particularly important context for understanding trends in FHA lending. Subprime lending increased sharply in 2003 and, by 2006, had surpassed $600 billion.[c] It accounted for one-fifth of mortgage originations in 2006, before it collapsed in 2007.[d] In this period, mortgage credit became more readily available

Chart 2
Fixed-Rate Home Mortgage Loans: Contract Interest Rate



Source: Federal Housing Finance Agency / Haver Analytics

Chart 3
S&P/Case-Shiller Home Price Index



Source: S&P, Fiserv, and MacroMarkets LLC / Haver Analytics

---

[a] While discussed separately, patterns that appeared in these factors over the decade were related to some degree.

[b] Although there is more than one definition of subprime lending, in this report, subprime refers to higher priced home mortgage credit as reported in the HMDA loan application register (LAR). In 2004, information was added to the HMDA LAR requiring that mortgage loan rate spreads be reported when the rate spread on the loan is above the threshold when compared with a comparable-maturity Treasury rate for first-lien mortgages with an annual percentage rate (APR) 3 percentage points over the Treasury benchmark and for junior liens with an APR 5 percentage points over the benchmark. These mortgages with a reported spread are commonly called "higher-priced," or subprime, loans. For a more complete discussion, see the study by Chris Mayer and Karen Pence (2008). These reporting rules were changed in 2009 with amendments to the Home Mortgage Disclosure Act (HMDA), Regulation C.

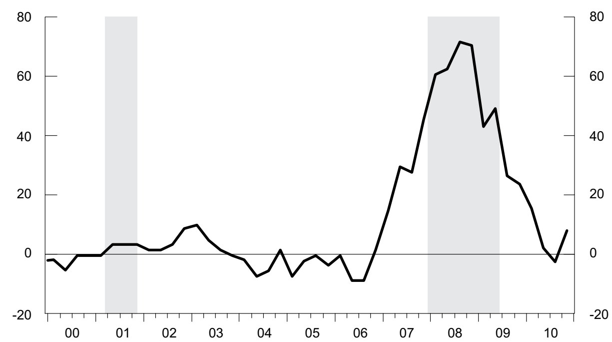
[c] See the report by the Federal Reserve Bank of Dallas (2009).

[d] See Federal Reserve Bank of Dallas (2009). Another source notes that the subprime market virtually disappeared in 2007, a year in which 169 lenders, primarily subprime nondepository lenders, ceased reporting HMDA data. See the article by Robert Avery, Kenneth Brevoort, and Glenn Canner (December 2008) for a more complete discussion of this topic.

to borrowers with low credit scores, and there was, more generally, a relaxing of overall credit standards.[e] Because of relaxed underwriting, as well as other factors discussed later in this report, subprime loans may have appeared to be a more attractive option than FHA loans in the middle of the past decade. In contrast, the collapse of subprime lending — and the broader housing market problems that followed — set the stage for the FHA's resurgence at the end of the decade.

[e] For example, the Federal Reserve Board's Senior Loan Officer Opinion Survey provides evidence that lending standards became less stringent during the early years of the housing boom. More information on this trend is provided in a subsequent report on delinquency trends. Additionally, this trend is evident in Chart 4.

Chart 4
Net Percentage of Banks Tightening Standards for Home Mortgage Credit from the Federal Reserve Senior Loan Officer Opinion Survey



Source: Federal Reserve Board / Haver Analytics

Lending Patterns: The National Picture

Total Lending Originations

Table 1 and Chart 5, based on HMDA data, show that total loan originations peaked relatively early in the previous decade, perhaps earlier than is commonly thought. There were approximately 8 million total loan originations and approximately $910.8 billion in loan originations in 2000. Total originations then rose, peaking several years later in 2003 at approximately 21.2 million by count or $3.39 trillion in dollar amount. Following the 2003 peak in total lending activity, originations declined by more than 30 percent in total number to approximately 14.9 million, and by more than 24 percent to $2.55 trillion in total dollar amount.[3] Following the 2004 declines, both total count and total dollar amount rose slightly in 2005, before continuing to decline in 2006 and 2007, when the problems in the housing market were first widely recognized, followed by an even more extreme drop in 2008. Indeed, in 2008 originations fell below their 2000 number. Following these declines, mortgage originations showed an increase in total count and in total dollar amount in 2009. However, lending levels in 2009 were still below pre-crisis levels, although somewhat higher than at the start of the decade.

Total Home Purchase Originations

Home purchase loans show a somewhat different pattern than that of all originations, peaking somewhat later (Table 2 and Chart 6). In 2000, there were 4.7 million home purchase originations by number and $617.6 billion such originations in dollar amount. From 2001 through 2005, home purchase originations grew each year, peaking mid-decade at 7.3 million in total number and $1.372 trillion in dollar amount. Following the 2005 peak, total home purchase originations declined sharply from 2006 through 2008, falling to 3.1 million and $646.6 billion. The 2008 level of home purchase originations was lower than in any previous year of the decade. In 2009, total home purchase originations fell further, to 2.7 million, and to $537.1 billion.

Total Refinance Originations

Home refinance originations show a different pattern than those of home purchase originations (Table 3 and Chart 7). When compared with Table 1, Table 3 suggests that overall trends were driven more by the refinance market than by the home purchase market during the 2000-2009 period. The period was one of historically low interest rates in comparison to the previous decade, and it was also a period of generally rising home prices, at least until the onset of the housing crisis in 2007. Many borrowers were able to extract the increased equity via cash-out refinancing and/or save money on their monthly payments by refinancing at a lower interest rate. In 2000, refinance originations were 2.3 million in total number and $244.8 billion in total dollar amount. In 2001, total refinance originations increased sharply, by 228 percent in total number, to 7.8 million, and by 352 percent in total dollar amount, to $1.1 trillion. In 2002, refinance originations grew again year over year.

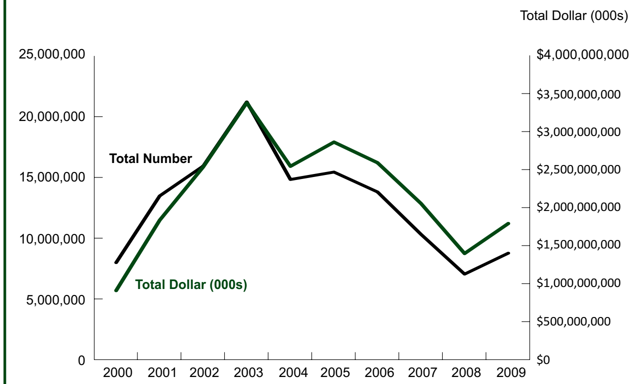
[3] The finding that the total number declined faster than the total dollar amount could be associated with higher loan to value (LTV) ratios on loans and increasing house prices.

Table 1: All Loan Originations

Year	Total Number	Total Dollar Amount (000s)
2000	7,993,076	$910,800,991
2001	13,495,238	$1,839,285,779
2002	15,956,485	$2,541,574,950
2003	21,239,352	$3,387,802,600
2004	14,853,678	$2,549,480,767
2005	15,461,475	$2,868,889,140
2006	13,822,786	$2,597,253,148
2007	10,322,042	$2,059,161,975
2008	7,049,993	$1,399,343,067
2009	8,774,823	$1,795,377,347

Source: HMDA

Chart 5
All Mortgage Originations



Source: HMDA

Following these two years of large increases in refinance origination activity, in 2003 originations grew again, as interest rates dropped sharply, to more than 15 million in total number, and to $2.4 trillion in total dollar amount, reaching their peak for the decade.

Following the 2003 peak, refinance originations declined sharply in 2004, to 7.5 million originations,[4] then continued to decline through 2008 to lows of 3.4 million and $710.3 trillion. This was the first time in eight years that home refinance originations were less than 4 million in total number and less than $1 trillion in total dollar amount annually.

In 2009, refinance originations grew by 65.3 percent in total number, to 5.7 million, and by 72.1 percent in total dollar amount, to $1.2 trillion. The increase is likely related to the low interest rates maintained by the Federal Reserve in response to ongoing problems in the economy. However, refinance activity remained well below its level in 2003, the year in which interest rates were at their previous low. That recent refinance activity has been relatively low in the context of recent interest rates may reflect, in part, many borrowers' inability to take advantage of these rates because their mortgages are underwater.

Overall, mortgage refinance activity was higher than home purchase activity throughout much of the decade, with the exception of 2006, when home purchase originations were slightly larger in terms of both total number and dollar amount. In 2002 and 2003, refinance originations were larger than home purchase originations by a factor of between 2 and 3. Especially in these years, but for nearly all of the decade as well, refinance originations were the dominant factor in determining whether overall mortgage loan originations rose or fell.

FHA Lending

Total Lending Originations

In recent years, the FHA has experienced dramatic changes. The FHA's market share stood at about 10.5 percent in 2000, then fell sharply over the first part of the decade, to about 3 percent in 2005 and 2006. Although total volume initially grew from 841,531 loans in 2000 to 1,184,731 loans in 2003 as the number of FHA-to-FHA refinances surged in response to low interest rates in the early part of the decade, it plunged thereafter, reaching a low of 387,548 loans in 2006. (That FHA market share fell at the beginning of the decade even as its loan count was rising reflects the expansion in scale of originations in the market as a whole, including, perhaps, a greater use of second liens in the non-FHA portion of the market.) FHA lending by dollar amount followed similar patterns over the period in terms of both volume and share (Tables 4 and 5 and Chart 8).

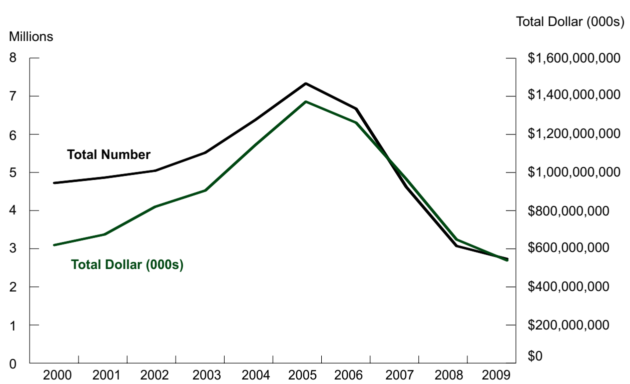
With the start of the housing crisis in 2007, this pattern reversed. In contrast to originations in the market as a whole, FHA loan originations increased in both total number and total dollar amount that year, and the FHA's market share increased as well. A further sharp increase in originations occurred in 2008, to more than 1.24 million, a level of FHA originations somewhat higher than loan counts between 2001 and 2003, and to a total dollar amount of

[4] Refinance originations likely peaked earlier than home purchase originations because refinance activity is very sensitive to interest rate trends and the low point in the interest rate before the housing crisis came in 2003.

Table 2: Total Home Purchase Originations		
Year	Total Number	Total Dollar Amount (000s)
2000	4,721,023	$617,554,669
2001	4,862,200	$673,489,711
2002	5,042,239	$818,862,567
2003	5,517,506	$904,463,253
2004	6,380,690	$1,144,555,574
2005	7,335,084	$1,371,796,688
2006	6,670,999	$1,260,853,714
2007	4,616,079	$964,385,201
2008	3,061,260	$646,642,083
2009	2,725,052	$537,085,045
Source: HMDA		

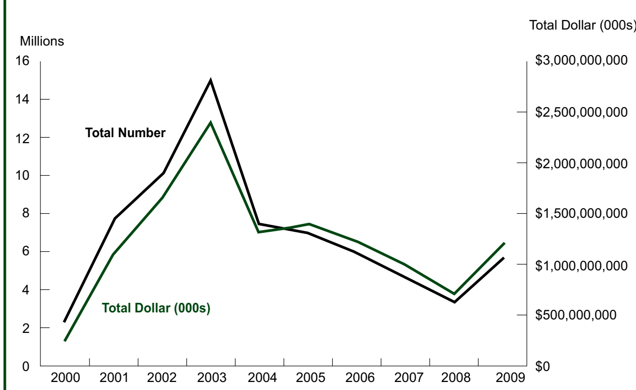
Table 3: Refinance Originations (Total Number)		
Year	Total Number	Total Dollar Amount (000s)
2000	2,381,116	$244,805,461
2001	7,799,971	$1,105,900,202
2002	10,179,761	$1,657,346,393
2003	15,018,635	$2,401,589,699
2004	7,532,449	$1,331,213,267
2005	7,060,185	$1,393,822,614
2006	6,037,889	$1,233,770,098
2007	4,768,274	$1,012,772,988
2008	3,434,028	$710,290,703
2009	5,675,219	$1,222,394,908
Source: HMDA		

Chart 6
Total Home Purchase Originations



Source: HMDA

Chart 7
Total Home Refinance Originations



Source: HMDA

$215.7 billion, also a new high for the decade. Market share rose to 17.6 percent. In 2009, growth in FHA loan originations continued. The total number grew year over year by 46.6 percent, to more than 1.8 million — once again, a new high for the decade — and total dollar amount grew by 53.9 percent, to $331.9 billion. As of 2009, the FHA's market share of mortgage originations was approximately 21 percent by loan count and 18.5 percent by dollar volume.

The rise and fall and rise of FHA lending in the past decade is a reverse image of the picture in the subprime segment of the market, where market share rose sharply in 2003 but collapsed in 2007.[5] The loss of FHA volume and share in the years when subprime lending was strongest may be related to the relatively greater ease of obtaining subprime loans. This greater ease was a result of the lower underwriting standards in the subprime sector and the relatively cumbersome process for obtaining FHA loans, especially until 2005, when FHA processes were streamlined. (Ceilings

[5] See, for example, the study by Marsha Courchane, Rajeev Darolia, and Peter Zorn.

on FHA loan amounts that did not keep pace with housing price appreciation in some parts of the country also made it difficult to use the FHA in those areas.) In the wake of the subprime collapse and the associated tightening of lending criteria in the mortgage market overall, the FHA has likely attracted not only borrowers with characteristics similar to borrowers the FHA lost to the subprime market earlier in the decade, but also borrowers who might have received prime loans in the past but for whom the FHA is currently a better option.

FHA Purchase Loans

In each year of the past decade, the FHA's share of purchase loans was greater than its share of all loans, not surprising for a program typically thought of as a purchase program (Table 4).[6] However, the FHA's purchase segment experienced much the same pattern of decline and recovery over the past decade as did FHA loans in total, albeit with some differences in the details. (See Table 6 and Chart 9.) In 2000, there were 772,767 FHA purchase originations, a 16.4 percent share of all purchase originations by loan count. Total dollar amount and share were $80.8 billion, and 13.1 percent, respectively. By 2006, purchase originations had fallen 35.7 percent from the 2000 level, to 275,724, and the FHA's share of purchase loans was 4.1 percent. (Unlike total FHA lending, FHA purchase lending did not experience an increase in volume early in the decade; the increase in total volume was driven by refinance activity, discussed below.)

While the pattern for *overall* lending turned around in 2007, FHA purchase loan originations by loan count increased only marginally that year, by 1 percent. (However, total dollar amount increased by 8.7 percent over 2006. In addition, purchase share increased as purchase originations in the non-FHA segment of the market continued to fall from their decade high in 2005.) In 2008, however, FHA purchase originations jumped to 756,353 by loan count and to $128.8 billion in total dollar amount, 226.5 percent, and 171.6 percent over their 2007 levels, while the FHA's share of purchase originations rose to 24.7 percent by loan count and to 19.9 percent by dollar volume, considerably higher than at the start of the decade. The next year, 2009, showed further increases in both loan count and dollar volume. (For example, purchase count rose to slightly more than 1 million loans, a year-over-year increase of 34.1 percent.) The FHA's share of all purchase originations by total number was 36.7 percent in 2009, while its dollar share stood at 32.1 percent.

FHA Refinance Loans

While the FHA has traditionally been thought of as a purchase program, it also originates refinance loans, which may be either refinances of conventional loans to FHA or FHA-to-FHA refinances. FHA refinance loans had a smaller share of all refinance originations in each year of the past decade than the FHA's share of all loans and, in all but one year, represented a smaller part of the FHA's overall

[6] Purchase loans also formed the majority of FHA loans in all but one year of the decade, although their share of FHA loans fluctuated considerably during this time period, a topic discussed in the next subsection in comparing the roles of FHA purchase and refinance loans.

Table 4: FHA Market Share

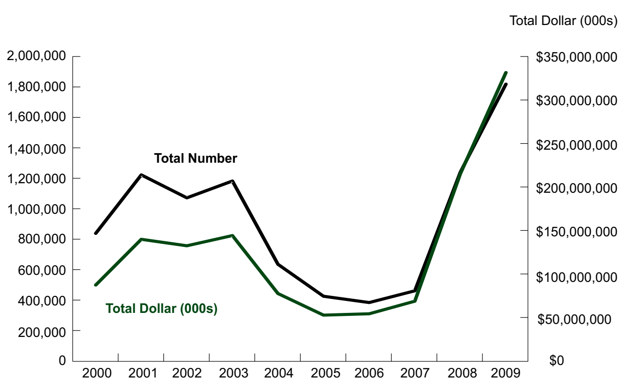
	Total Number			Total Dollar Amount		
Year	All	Purchase	Refinance	All	Purchase	Refinance
2000	10.53%	16.37%	2.39%	9.64%	13.09%	2.51%
2001	9.08%	16.74%	5.18%	7.64%	13.56%	4.35%
2002	6.73%	13.72%	3.71%	5.23%	10.57%	2.73%
2003	5.58%	10.69%	3.93%	4.27%	8.08%	2.93%
2004	4.30%	6.66%	2.77%	3.06%	4.62%	1.87%
2005	2.77%	4.11%	1.74%	1.86%	2.72%	1.13%
2006	2.80%	4.13%	1.76%	2.11%	2.88%	1.46%
2007	4.50%	6.03%	3.72%	3.37%	4.09%	2.85%
2008	17.63%	24.71%	13.83%	15.41%	19.92%	12.00%
2009	20.76%	36.70%	14.30%	18.49%	32.16%	12.91%

Source: HMDA

Table 5: Total FHA Loan Originations		
Year	Total Number	Total Dollar Amount (000s)
2000	841,531	$87,782,917
2001	1,224,915	$140,466,329
2002	1,074,186	$133,050,681
2003	1,184,731	$144,687,506
2004	638,757	$78,100,681
2005	428,434	$53,264,532
2006	387,548	$54,768,532
2007	464,667	$69,402,415
2008	1,242,686	$215,677,400
2009	1,821,227	$331,936,141
Source: HMDA		

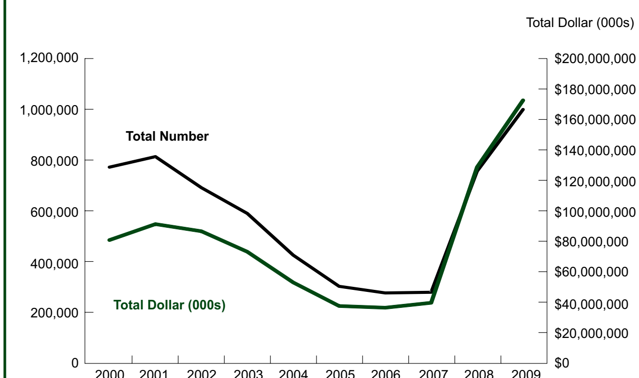
Table 6: FHA Home Purchase Loan Originations		
Year	Total Number	Total Dollar Amount (000s)
2000	772,767	$80,830,579
2001	814,115	$91,324,344
2002	691,667	$86,548,638
2003	589,636	$73,076,913
2004	425,212	$52,893,330
2005	301,697	$37,348,744
2006	275,724	$36,299,408
2007	278,459	$39,445,697
2008	756,353	$128,779,108
2009	1,000,020	$172,719,237
Source: HMDA		

Chart 8
Total FHA Loan Originations



Source: HMDA

Chart 9
FHA Home Purchase Loan Originations



Source: HMDA

volume than did FHA purchase loans (Tables 4 and 7). Nonetheless, at a number of points in the decade they made up a substantial percentage of FHA loans.

The pattern in FHA refinance originations is somewhat different from that for FHA home purchase originations. (See Table 8 and Chart 10.) In 2000, there were only 57,027 FHA refinance originations by number and $6.1 billion in total FHA refinance originations by dollar amount. From 2001 through 2003, FHA refinance originations grew sharply, perhaps as a result of a low interest rate environment, and reached 590,851 and $70.3 billion. Additionally, a change in refinance regulations contributed to the large number of refinance loans in 2003.[7] In that year, the number of FHA refinance originations was higher than FHA purchase originations, according to HMDA data. (From 2001 to 2003, the FHA's share of all refinance originations also grew slightly, averaging 4.2 percent in total number and 3.2 percent in total dollar amount in comparison to a share in 2000 of 2.4 percent of total number and 2.5 percent of total dollar amount.)

Like all refinance activity, FHA refinance originations plunged in 2004, to 208,679, a 64.7 percent decline from the previous year. Because FHA refinance activity fell at a faster

[7] See Harriet Newburger, "FHA Lending: Recent Trends and Their Implications for the Future," Federal Reserve Bank of Philadelphia Community Development Discussion Paper (forthcoming).

rate than refinance activity in the market as a whole, the FHA's refinance market share also fell, to 2.8 percent of total loan amount and to 1.8 percent of total dollar amount. The FHA's refinance activity remained relatively flat until 2007, when an increase in refinance activity fueled a reversal in the trend in overall FHA volume at the start of the housing crisis. Refinance volume then increased sharply in 2008 and 2009. In 2008, refinance activity grew to 474,766 in total number and to $85.3 billion in total dollar amount, representing 13.8 percent of total refinance by number and 12 percent by total dollar amount. In 2009, FHA refinance originations increased year over year by 70.9 percent in total number, to 811,325, a decade high level for FHA refinance originations, and total dollar amount increased by 85.1 percent year over year, to $157.8 billion, representing 14.3 percent of refinance loan count and 12.9 percent of refinance dollar amount, respectively. It is noteworthy that at the beginning of the decade, FHA refinance activity was more likely to be FHA-to-FHA, while conventional to FHA refinance activity has been more prevalent since the start of the 2007-2009 housing crisis, a point that will be discussed further in the second section of this report that begins on page 19.

Variations in FHA Lending Across States

While all regions in the U.S. experienced declines in FHA volume (and in the FHA's share of total originations) between 2000 and 2006, the extent of these declines varied greatly for individual states and regions of the country. Maps 1 through 4 provide information on the scale of FHA lending by loan count for each state and on each state's share of total FHA volume for 2000, 2003, 2006, and 2009, respectively. Maps 3 and 4 demonstrate that the FHA's resurgence after 2006 was nationwide and not just limited to specific parts of the country.

In 2000, FHA volume was, for the most part, distributed in approximate proportion to the population distribution across states. This is largely the case in 2003 as well, although it is clear that the importance of California, the nation's largest state, as a source of FHA originations is declining. By 2006, when the FHA's decline bottoms out, the picture is quite different. FHA loan count in the "sand states"[8] has dropped to extremely low levels; this is particularly apparent in Map 3 in the western third of the country. Lending has dropped in the remainder of the states as well, although generally the drop has not been as extreme. As a result, the distribution of FHA lending across states shifts considerably, with states in the central part of the country, in particular, gaining in their share of total FHA volume. California and Texas illustrate two extremes in FHA lending trends over this period. (See *California and Texas* on page 16.) In 2009, well into the FHA's resurgence, the distribution of FHA lending originations bears a strong resemblance to the picture in 2000, when that distribution in large part reflected population distribution, although loan levels are obviously considerably higher in 2009. The return of FHA lending to the sand states is particularly notable.

[8] The "sand states" are California, Arizona, Nevada, and Florida.

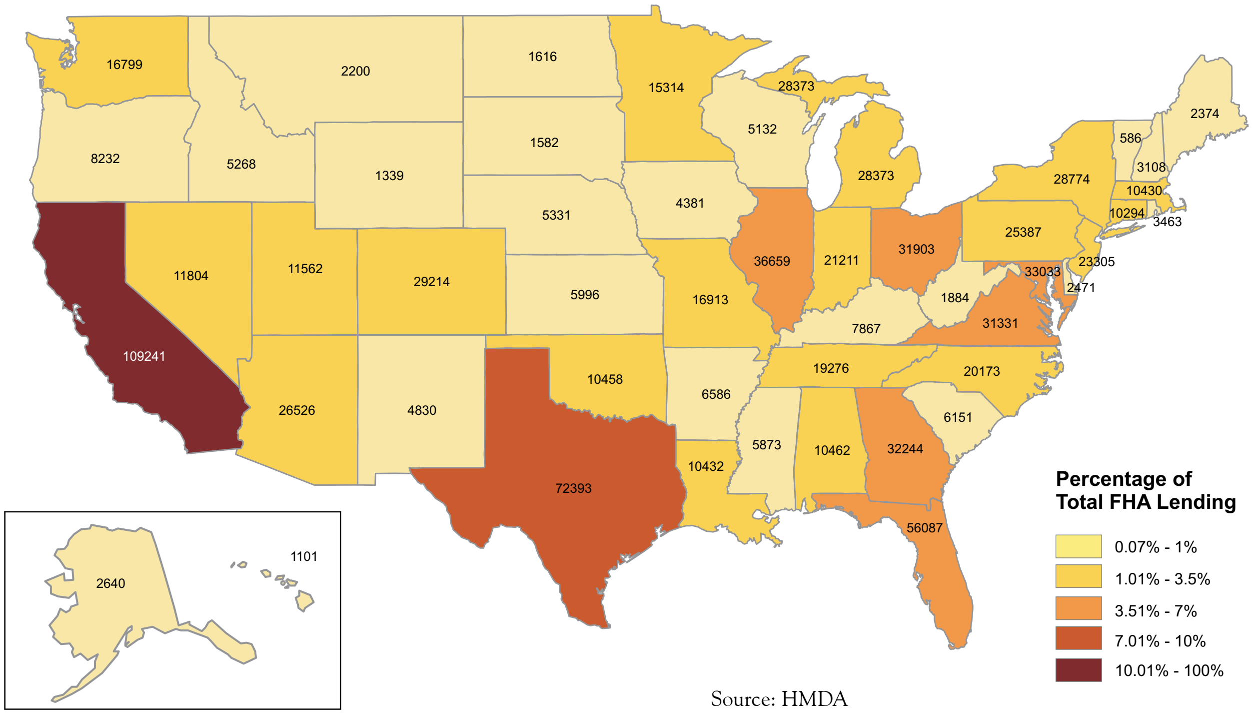
Table 7: FHA Originations, 2000 to 2009

	Count				Dollar Amount			
Year	All Loans	Purchase Loans	Refinance Loans	Refinance as % of All loans	All	Purchase	Refinance	Refinance as % of All loans
2000	841,531	772,767	57,027	**6.78%**	$87,782,917	$80,830,579	$6,149,684	**7.01%**
2001	1,224,915	814,115	404,177	**33.00%**	$140,466,329	$91,324,344	$48,064,661	**34.22%**
2002	1,074,186	691,667	377,983	**35.19%**	$133,050,681	$86,548,638	$45,281,959	**34.03%**
2003	1,184,731	589,636	590,851	**49.87%**	$144,687,506	$73,076,913	$70,275,677	**48.57%**
2004	638,757	425,212	208,679	**32.67%**	$78,100,681	$52,893,330	$24,914,268	**31.90%**
2005	428,434	301,697	122,777	**28.66%**	$53,264,532	$37,348,744	$15,688,141	**29.45%**
2006	387,548	275,724	106,323	**27.43%**	$54,768,532	$36,299,408	$17,952,634	**32.78%**
2007	464,667	278,459	177,339	**38.16%**	$69,402,415	$39,445,697	$28,839,578	**41.55%**
2008	1,242,686	756,353	474,766	**38.20%**	$215,677,400	$128,779,108	$85,256,713	**39.53%**
2009	1,821,227	1,000,020	811,325	**44.55%**	$331,936,141	$172,719,237	$157,794,076	**47.54%**

Source: HMDA

Map 1

FHA Loan Originations as Share of FHA Originations (Loan Count) - 2000*

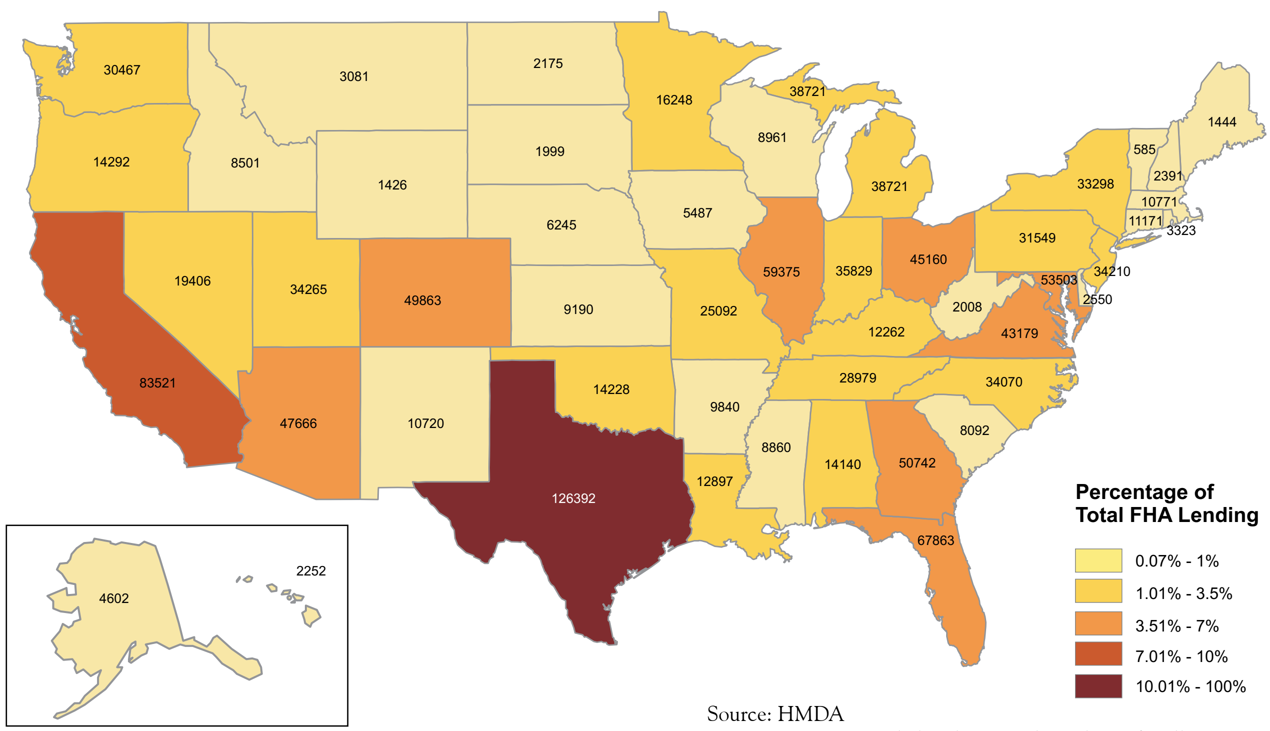


Source: HMDA

* Loan count is provided within state boundaries for all maps.

Map 2

FHA Loan Originations as Share of FHA Originations (Loan Count) - 2003*

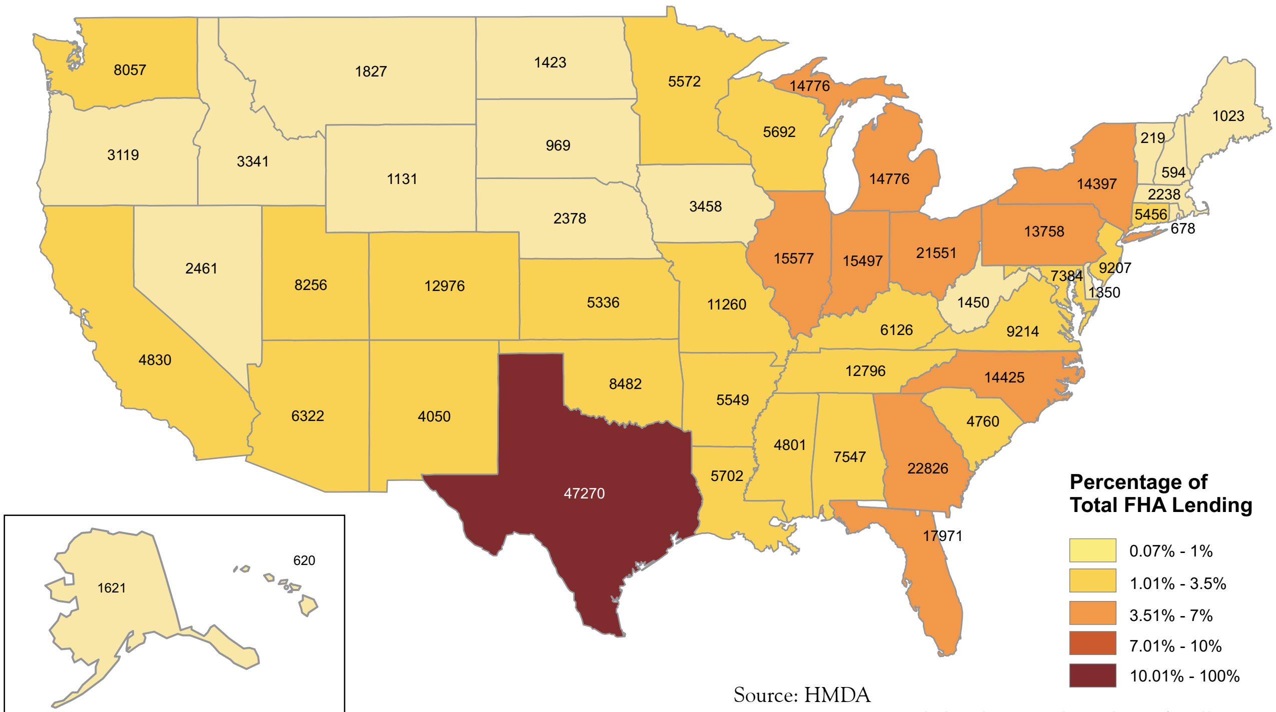


Source: HMDA

* Loan count is provided within state boundaries for all maps.

Map 3

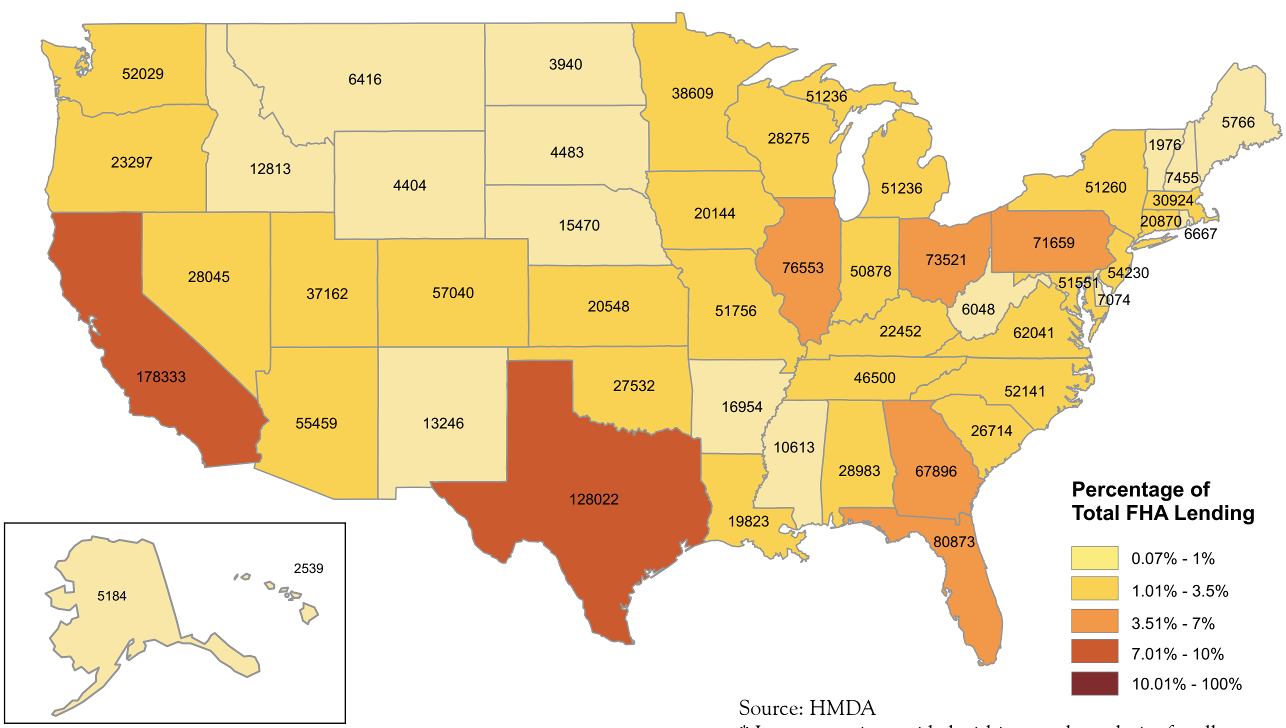
FHA Loan Originations as Share of FHA Originations (Loan Count) - 2006*



Source: HMDA
* Loan count is provided within state boundaries for all maps.

Map 4

FHA Loan Originations as Share of FHA Originations (Loan Count) - 2009*

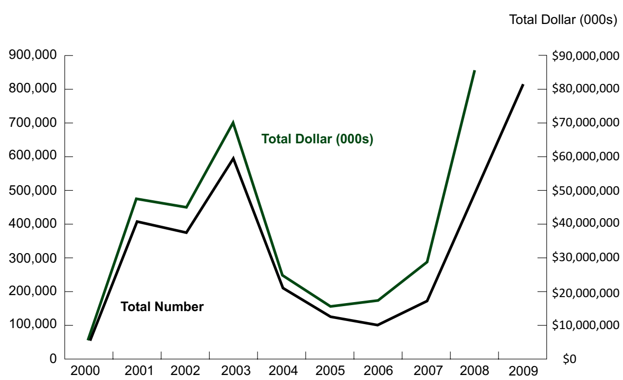


Source: HMDA
* Loan count is provided within state boundaries for all maps.

Table 8: FHA Home Refinance Originations

Year	Total Number	Total Dollar Amount (000s)
2000	57,027	$6,149,684
2001	404,177	$48,064,661
2002	377,983	$45,281,959
2003	590,851	$70,275,677
2004	208,679	$24,914,268
2005	122,777	$15,688,141
2006	106,323	$17,952,634
2007	177,339	$28,839,578
2008	474,766	$85,256,713
2009	811,325	$157,794,076
Source: HMDA		

Chart 10
FHA Home Refinance Originations



Source: HMDA

A comparison of the FHA mortgage market with the total mortgage market over the past decade shows some similarities but also some pronounced differences between the two. The differences occur both in the trends in volume and in the relative importance of purchase and refinancings in determining overall trends.

Trends in Volume

Volume for the mortgage market as a whole increased considerably at the start of the decade, fueled by a surge in refinance activity in response to low interest rates. Overall market volume peaked in 2003, earlier in the decade than is commonly believed. In subsequent years, both the volume of refinancings and overall volume declined, although the fall in overall volume was tempered by an increase in purchase volume mid-decade. With the subprime collapse in 2007, and the broader mortgage market crisis, total market volume (and volume in both the refinancing and purchase segments) fell sharply; in response to extremely low interest rates, refinancing and overall volume increased somewhat in 2009, although total, refinancing, and purchase volume all remain considerably below their decade highs. As in the overall market, FHA lending increased sharply at the start of the decade as refinancing volume grew in response to low interest rates; beyond this point, however, the FHA experience and that of the total market diverged in critical ways. As in the market as a whole, total volume and refinancing volume both fell subsequent to 2003. In the case of the FHA, the fall was accompanied by a fall in purchase volume; furthermore, refinancing activity fell at a faster rate than in the overall market, with the result that the FHA's shares of the total, purchase, and refinancing markets all fell. Moreover, as volume in the overall market fell in the wake of the subprime collapse, the FHA's refinancing and purchase volume (and consequently total volume) grew; the increase in purchase volume was particularly sharp. Unlike the case in the overall market, the FHA finished the decade with higher total, purchase, and refinancing volume than at the decade's start, and its market share was considerably higher than it had been at any point prior to the subprime crisis.

Relative Importance of Refinancings and Purchase Activity in Determining Overall Trends

Throughout the past decade, refinance originations have been the dominant factor in the total market, both in terms of share of overall volume and in determining the overall direction in volume. For example, in 2001 and 2003 this trend is evident where the FHA purchase volume declined while overall volume increased. By contrast, in the case of the FHA, purchase originations have been the dominant factor in every year except for 2003. This finding is congruent with the general perception of the FHA program as primarily a purchase program.

The large differences in volume trends between the overall market and the FHA after 2003 are closely related to the waxing and waning of subprime lending between 2003 and 2007. Evidence strongly suggests that the FHA lost potential borrowers to the subprime sector (whose activity is captured in overall market volume) during this period. (See, for example, Courchane, et al.) A variety of FHA requirements likely contributed to making subprime loans appear more attractive to potential borrowers than FHA loans. For example, the process of getting FHA status for a loan was extremely cumbersome and could work to a purchaser's disadvantage in hot housing markets.[9] Moreover, loan limits in the FHA program stipulated a maximum mortgage amount for which the FHA program could be used. While these limits varied across geographies, they did not keep up

[9] This process was streamlined in 2005.

California and Texas

California and Texas, which together had a share of FHA originations ranging from about 13 percent to more than 20 percent between 2000 and 2009,* illustrate two extremes in FHA lending trends over the course of that decade.

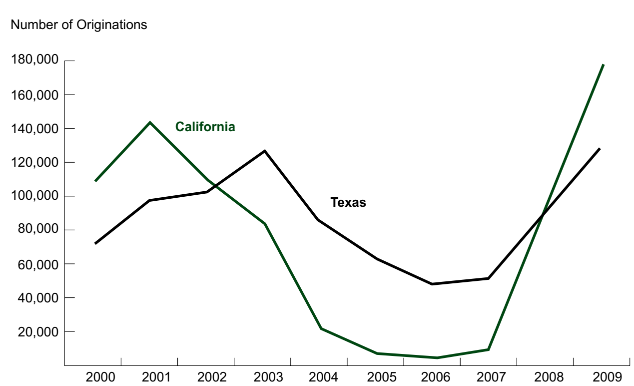
California had the largest percentage decrease in FHA lending and began to experience that decrease earlier than other states (Chart 11). According to HMDA figures, in 2000, California accounted for 11.8 percent of all mortgage originations but nearly 13 percent of FHA loans. This 13 percent share was the highest in the nation. By 2006, California accounted for more than 14 percent of all mortgage originations but only 1.23 percent of all FHA originations. One factor contributing to the FHA's decline in California over this period may have been the low level of FHA loan ceilings compared with house prices in many parts of the state. In the aftermath of the subprime collapse, California's share of total FHA originations rebounded to about 10 percent by 2009; in this year, California's FHA lending originations had increased by a factor of about 37 from their 2006 low. A 2008 increase in FHA loan ceilings, from less than $400,000 in 2006 and 2007 to its current level of about $729,000, has likely contributed to the size of the rebound.

Compared with the situation in California, FHA lending originations were relatively *stable* in Texas, where the decline in FHA originations was much lower than was typical elsewhere. In 2000, Texas accounted for 6 percent of all originations and 8.5 percent of total FHA originations. As in the nation as a whole, FHA originations in Texas peaked in 2003 and then fell to a low point in 2006. However, FHA lending originations in Texas that year were still above 47,000 in total count, while FHA originations in California fell below 5,000; that is, there were almost 10 times as many FHA originations in 2006 in Texas as in California. In that year, Texas had a 12 percent share of all FHA originations, the largest in the nation. (Unlike in California, house prices in Texas tend to be low compared with the rest of the country. In addition, Texas had little house price appreciation in the first part of the past decade. In turn, to the extent that FHA loan limits were a factor in the FHA's decline during that period, one would expect less impact on FHA volume in Texas than in California.) With the resurgence of the FHA at the end of the decade, Texas's share of FHA originations fell. It stood at 7 percent in 2009, close to its 2000 share.

---

* Overall, according to HMDA data, California accounts for 9.31 percent of total FHA originations from 2000-2009, and Texas accounts for 8.1 percent of the FHA total for this period.

Chart 11
FHA Loan Originations in California and Texas, 2000 to 2009 (Loan Count)



Source: HMDA

with house price appreciation in some areas, and relatively low loan limits made the FHA a poor vehicle for mortgage financing in coastal states such as California during the years of rising home prices. With the collapse of subprime lending and the subsequent tightening of underwriting standards in the mortgage sector as a whole, FHA lending rebounded. Higher loan limits authorized by Congress and a streamlined process for gaining FHA loan status have likely contributed to the rebound.

The increase in FHA volume appears to come from two sources. First, some purchasers who might have gotten subprime loans mid-decade are now getting loans from the FHA.[10] However, the increase in FHA volume cannot be attributed solely to a return of borrowers who might have found subprime a more attractive option mid-decade. The credit score distribution of recent FHA borrowers[11] suggests that, with the tightening of the credit market, some borrowers who might in the past have gotten prime conventional loans may not be able to do so and are turning to the FHA as an alternative; that is, much of the FHA's increased market share is crisis driven.

The national patterns explained here regarding total originations and FHA originations provide a useful illustration of the mortgage market in the nation as a whole. To the extent that the FHA is acting as a stabilizing factor in the market, and its increased use in recent years is primarily crisis-related, then as the housing market improves, the FHA's market share and volume are likely to decline. It is possible, however, that some of the buyers who in a stronger market might be expected to get prime conventional mortgages will continue to find the FHA to be a better alternative. Factors such as the availability of private mortgage insurance and the strictness of post-crisis underwriting standards are likely to affect the decision-making calculus. "Brand loyalty" may also be a factor: Following the economic crisis in oil patch states in the early 1980s, the FHA program's market share in Texas remained high compared to the rest of the nation. Given such factors, the future scale of FHA lending will be interesting to follow.

[10] It should be noted, however, that because FHA underwriting criteria are stricter than those of the subprime sector, not all borrowers who might have gotten subprime loans in the past can now get them from the FHA. Current lender underwriting policies may also limit the extent to which borrowers who might have qualified for a subprime loan in the past can now get an FHA loan; for example, evidence suggests that in 2009, lenders made few loans to potential buyers with FICO scores below 620. For a more complete discussion, see Harriet B. Newburger, "FHA Lending: Recent Trends and Their Implications for the Future," Federal Reserve Bank of Philadelphia Community Development Discussion Paper (forthcoming).

[11] More information on this trend is available in the next section of this report, which begins on page 19.

REFERENCES

Avery, Robert, Kenneth Brevoort, and Glenn Canner. "The 2007 HMDA Data," *Federal Reserve Bulletin* (December 2008).

Courchane, Marsha, Rajeev Darolia, and Peter Zorn. "Industry Changes in the Market for Mortgage Loans," *Connecticut Law Review,* 41:4 (2009), pp. 1143-76.

Federal Financial Institutions Examination Council. "Who Reports HMDA Data?" FFIEC (2010); available online at http://www.ffiec.gov/hmda/reporter.htm.

Federal Reserve Bank of Dallas. "The CRA and Subprime Lending: Discerning the Difference," *Banking and Community Perspectives,* 1 (2009).

Mayer, Chris, and Karen Pence. "Subprime Mortgages: What, Where, and to Whom?" Finance and Economics Discussion Series, Washington: Board of Governors of the Federal Reserve System, Division of Research and Statistics and Division of Monetary Affairs (2008-29); available at http://www.federalreserve.gov/pubs/feds/2008/200829/200829pap.pdf.

Newburger, Harriet B. "FHA Lending: Recent Trends and Their Implications for the Future," Federal Reserve Bank of Philadelphia Community Development Discussion Paper (forthcoming).

U.S. Department of Housing and Urban Development. Federal Housing Administration (2010); available at http://www.hud.gov/offices/hsg/fhahistory.cfm.

THE QUALITY OF FHA LENDING IN PENNSYLVANIA, NEW JERSEY, AND DELAWARE

The Federal Housing Administration (FHA), an agency within the Department of Housing and Urban Development (HUD), insures mortgage loans made by private lenders.[1] All FHA-insured borrowers pay for mortgage insurance as one of the terms of their mortgage loan, and this insurance protects the lender against losses if the borrower defaults.[2] In addition to providing a mortgage guarantee, the FHA single-family loan program has features such as a low down payment and a low minimum credit score that benefit borrowers who may not be able to obtain financing in the conventional market. Because of the FHA's guarantee, lenders are willing to extend credit to borrowers who might otherwise be excluded from the mortgage market. In recent decades, the FHA single-family home loan program has disproportionately served first-time homebuyers as well as low- and moderate-income (LMI) and minority households.[3]

The market share of the FHA portfolio has waxed, waned, and waxed again in recent years, as discussed in the other section of this report that begins on page 5. The recent growth in the FHA portfolio means that it now serves a much broader segment of the housing market than its traditional base. Over the past decade, the housing market as a whole as well as the FHA portfolio's performance has been influenced by several major factors, including trends in interest rates, unemployment rates, house prices, and the rise and fall of the subprime market.

[1] The FHA administers a variety of mortgage programs that provide individuals with purchase or refinance mortgages as well as other programs such as reverse mortgages for older households. The two largest of its four mortgage insurance programs are the Mutual Mortgage Insurance/Cooperative Management Housing Insurance (MMI) program and the General Insurance/Special Risk Insurance (GI/SRI) program. The MMI program provides insurance for home mortgages and for home equity conversion mortgages (HECMs), and the GI/SRI program provides insurance for multifamily rental construction and funds for hospitals and assisted living facilities throughout the United States.

[2] This insurance is paid for in the form of an upfront fee as well as an annual premium. Lenders originating FHA loans are required to carry out loss mitigation on their FHA loan portfolio.

[3] In this report, the FHA single-family home loan program is called simply the FHA program. See the FHA's website for more information on the history of the program and its accomplishments by decade: http://www.hud.gov/offices/hsg/fhahistory.cfm.

As the FHA portfolio has grown in relative market share and size since the beginning of the housing crisis in 2007,[4] it has experienced a concomitant increase in its delinquency rates and a corresponding decrease in its capital reserves, raising concerns about potential costs to taxpayers.[5] While an in-depth examination of the financial condition of the entire FHA program is beyond the scope of this investigation, this report provides information on the quality and performance of recent borrower cohorts in 2006, 2007, 2008, and 2009, both nationally and in the Third District states of Pennsylvania, New Jersey, and Delaware. The credit score at the time of loan origination is used as a measure of borrower quality, while loan status at the one-year point is used as an indicator of loan performance.

Data Sources

The data sources for this investigation include the Home Mortgage Disclosure Act (HMDA) database and a large national mortgage database of servicer data compiled by Lender Processing Services (LPS) Applied Analytics, Inc. The HMDA database is used to present an overview of FHA lending patterns in the Third District states in the next section. While the HMDA database does not contain information on all mortgage originations, it covers a large majority, and it is particularly well-suited for providing time series data on lending volume for the FHA program and for the FHA program's market share.[6]

The LPS database covers approximately 60 percent of all prime originations and 19 percent of all subprime originations. Also, the number of FHA loans in the LPS database is approximately 60 to 70 percent of the number of

[4] See the other section of this report, which starts on page 5, for a more complete discussion of overall FHA trends in the nation.

[5] See Department of Housing and Urban Development, November 17, 2010, or the article by Nick Timiraos.

[6] For a complete discussion of HMDA reporting requirements, see the publication of the Federal Financial Institutions Examination Council, "Who Reports HMDA Data?" (Washington, D.C., 2010), available at http://www.ffiec.gov/hmda/reporter.htm.

FHA loans in the HMDA database.[7] While LPS's coverage of the FHA portfolio is lower than HMDA's, the LPS database contains additional variables on credit score and performance that are missing in the HMDA data. This report uses those additional variables to examine borrower credit score trends and delinquency patterns in the 2006, 2007, 2008, and 2009 cohorts of the FHA portfolio.

FHA Lending in Pennsylvania, New Jersey, and Delaware

The HMDA data indicate that overall lending volume for FHA loans for Pennsylvania, New Jersey, and Delaware has largely followed national patterns over the past decade.[8] As in the national case, total activity for FHA lending peaked early in the decade, fell to its lowest level mid-decade (2005 and 2006), and rose sharply after the onset of the housing crisis in 2007 and continuing through 2009 (Table 1).

While the Third District states, in general, follow national patterns, there are similarities and differences between the FHA's lending patterns in Pennsylvania, New Jersey, and Delaware that are worth noting.

Home Purchase

FHA home purchase lending was at high levels in the three states in 2000 and 2001 and fell mid-decade. New Jersey and the nation both experienced their lowest levels of FHA home purchase activity in 2006, while Pennsylvania and Delaware experienced their lowest levels one year earlier in 2005. In Pennsylvania, there were 22,998 FHA home purchase originations in 2000, but this number fell to 9,335 in 2005 (a decrease of 59.4 percent) at the FHA program's lowest point. FHA home purchase activity then began a sharp rise in 2008 and 2009, ending the decade at 39,081 (an increase of 318.7 percent from the low point). Similar patterns are evident in New Jersey: There were 20,030 home purchase originations in 2000, 4,566 home purchase originations in 2006 (a decrease of 77.2 percent), and 23,847 in 2009 (an

Table 1: FHA Originations in the Nation and Third District States by Total Loan Count

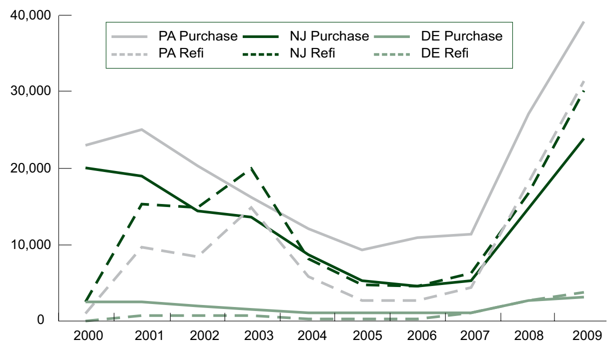
Year	U.S.	PA	NJ	DE
All				
2000	841,531	25,387	23,305	2,471
2001	1,224,915	35,465	35,209	3,222
2002	1,074,186	29,361	29,886	2,698
2003	1,184,731	31,549	34,210	2,550
2004	638,757	18,351	17,136	1,565
2005	428,434	12,369	10,215	1,069
2006	387,548	13,758	9,207	1,350
2007	464,667	16,625	11,878	1,759
2008	1,242,686	45,954	31,723	5,095
2009	1,821,227	71,659	54,230	7,074
Purchase				
Year	U.S.	PA	NJ	DE
2000	772,767	22,998	20,030	2,331
2001	814,115	24,912	19,018	2,495
2002	691,667	20,443	14,465	2,135
2003	589,636	16,161	13,740	1,540
2004	425,212	11,995	8,621	1,128
2005	301,697	9,355	5,131	810
2006	275,724	10,979	4,566	1,040
2007	278,459	11,449	5,322	981
2008	756,353	26,943	14,505	2,609
2009	1,000,020	39,081	23,847	3,206
Refinance				
Year	U.S.	PA	NJ	DE
2000	57,027	1,034	2,491	111
2001	404,177	9,698	15,445	698
2002	377,983	8,498	14,701	554
2003	590,851	14,989	20,066	993
2004	208,679	5,991	8,054	431
2005	122,777	2,660	4,710	249
2006	106,323	2,401	4,463	284
2007	177,339	4,660	6,417	730
2008	474,766	18,355	16,982	2,426
2009	811,325	31,893	30,142	3,826

Source: HMDA

[7] For the nation as a whole, FHA coverage in LPS is at least 60 percent of HMDA. Coverage varies by geography and is higher in the Third District states. While it varies for different years, the coverage for the Third District states is at least 75 percent. (The lowest share of coverage is the 75 percent figure for Pennsylvania in 2006; coverage is higher in all other geographies and time periods for the Third District states.) Despite considerable overlap between LPS and HMDA, the LPS data set contains some FHA loans that are not in the HMDA database. In turn, the set of loans used in analyzing the LPS data is not simply a subset of the set of loans used in the HMDA analysis.

[8] Background on total lending for the FHA program at the national level is provided in the other section of this report, which starts on page 5. Here we provide a similar background for the Third District states. The other section of this report also contains a more detailed discussion of the national trends.

Chart 1
Comparison of FHA Lending in Pennsylvania, New Jersey, and Delaware
(Home Purchase vs. Home Refinance)



Source: HMDA

increase of 422 percent). Similarly, in Delaware, home purchase loan originations were 2,331 in 2000, 810 in 2005 (a decrease of 65.3 percent), and 3,206 in 2009 (an increase of 295.8 percent). As this discussion indicates, fluctuations in FHA home purchase activity were less extreme in Pennsylvania and Delaware than in New Jersey (Table 1, Chart 1).

Home Refinance

The Third District states largely follow the national trend for FHA home refinance activity. As in the nation, FHA refinance activity in the Third District states hit a peak in 2003,[9] then dropped through mid-decade in each state. Refinance activity turned around substantially after 2006 and was at new highs in each state in 2009. In New Jersey, the number of refinance loans in the FHA program was the highest for the three states in all years except 2008 and 2009, when the Pennsylvania count was slightly higher (Chart 1, Table 1).

Comparison of Home Refinance to Home Purchase

In the nation as a whole, only in 2003 was the total number of refinance loans in the FHA program higher than the number of FHA home purchase loans. FHA trends in the Third District states, however, varied from those in the nation. Of note, in New Jersey in 2002 and 2003, and more recently in 2007, 2008, and 2009, more mortgage borrowers used the FHA program to refinance a house than to purchase one. Even in the intervening years of 2004, 2005, and 2006, FHA refinance activity was nearly as large as its home purchase activity in that state. In 2008 and 2009, this phenomenon is present in Delaware as well. In Pennsylvania, the ratio of refinance to home purchase has fluctuated from a low of 4.5 percent in 2000 to a high of 92.75 percent in 2003, so that the FHA home purchase share has remained dominant in all years; overall, trends in Pennsylvania more closely resembled national trends than did those of the other two states in the Third District. (See Chart 1 and Table 2.)

Table 2: Ratio of FHA Home Refinance to Home Purchase, 2000 to 2009

Year	U.S.	PA	NJ	DE
2000	7.38%	4.50%	12.44%	4.76%
2001	49.65%	38.93%	81.21%	27.98%
2002	54.65%	41.57%	101.63%	25.95%
2003	100.21%	92.75%	146.04%	64.48%
2004	49.08%	49.95%	93.42%	38.21%
2005	40.70%	28.43%	91.79%	30.74%
2006	38.56%	21.87%	97.74%	27.31%
2007	63.69%	40.70%	120.57%	74.41%
2008	62.77%	68.13%	117.08%	92.99%
2009	81.13%	81.61%	126.40%	119.34%

Source: HMDA

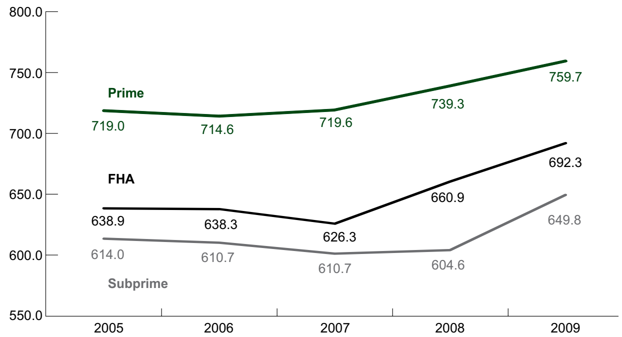
Credit Scores

Credit scores are used as an indicator of the quality of the borrower pool in the FHA portfolio. Although they are an important indicator for this purpose, it should be noted that they are by no means the only factor that is important in predicting the probability of a mortgage default. This has been particularly true during the housing crisis. For example, among the factors that have been important during this time period have been unemployment rates, loan to value (LTV) ratios, housing price trends, and mortgage loan structures. Since these factors change over time, the probability that an individual with a particular credit score will default will also vary at different points in time. While such factors are noted in the discussion, they have not been formally incorporated into the analysis. (See, for example, the discussion of home purchase loan performance in 2006 vs. home purchase loan performance in 2008, below.) In turn, the data provided here on credit scores help to provide a picture of the relevant borrower cohorts but are not meant to be used as a sole predictor of default probabilities.

We used data from LPS to calculate mean borrower credit scores for all FHA first-lien mortgage originations

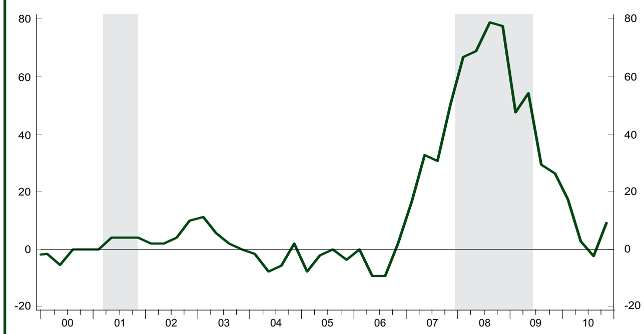
[9] Refinance activity likely increased early in the decade as a result of the low interest rate environment spurred by the Federal Reserve in response to economic difficulties following the 2001 recession.

Chart 2
Mean Credit Score by Loan Type,
2005 to 2009 - United States



Source: Lender Processing Services Applied Analytics, Inc. (LPS)

Chart 3
Net Percentage of Banks Tightening Standards for Home Mortgage Credit from the Federal Reserve Senior Loan Officer Opinion Survey



Source: Federal Reserve Board/Haver Analytics

* After Q1 2007, this question was dropped from the Federal Reserve survey, but Haver Analytics has, on its own, extended the series past this date.

for each year from 2005 through 2009 and, for comparison purposes, for prime and subprime originations as well; all means presented in this section were calculated using data on both purchase and refinance loans. Chart 2 shows the mean credit score for each cohort by loan type (prime, subprime, and FHA) for the nation as a whole.[10] As would be expected, both FHA and subprime borrowers have mean credit scores substantially lower than those borrowers receiving prime loans in all years. However, the credit scores of borrowers in the FHA program are higher than those of subprime borrowers in all years, including years in which the share of subprime loans was nontrivial.

Between 2005 and 2007, mean credit scores were relatively flat for prime loans and fell for both FHA and subprime loans, both nationally and in the Third District states (Table 3). After the advent of the housing crisis in 2007, the mean credit scores of borrowers for all loan types increased, again for both the nation and the Third District states. In part, this increase reflects an overall tightening of lending standards due to the housing crisis. Evidence that lending standards were tightening comes from a time series from Haver Analytics,[11] based on data collected by the Federal Reserve Board, on the extent to which loan officers at mortgage lending institutions report whether they are easing or tightening credit standards for home mortgages (Chart 3). For this purpose, Haver calculates an index,[12] which is the difference between the share of respondents tightening credit and those easing standards; its value was particularly high in 2008.[13]

By 2009 the mean borrower credit scores for FHA originations were in prime territory for the nation as a whole and in the Third District states. As credit standards have tightened with the onset of the housing crisis, the FHA is likely financing borrowers who might once have been able to obtain financing in the prime market. This may explain why the gap between FHA cohorts' credit scores and credit scores for prime loan cohorts narrowed from 2007 through 2009. In addition, data from LPS suggest that lenders may have been reluctant to make loans to borrowers with credit scores below 620 in 2009, further contributing to the rise in average credit scores for this FHA cohort and to the narrowing of the gap between credit scores for prime borrowers and FHA borrowers in this year.

While all of the Third District states exhibit the same basic pattern for mean credit scores over time, there are

[10] In evaluating the figures in this chart, it should be noted that LPS data in general provide considerably less coverage of the subprime sector than of the prime sector and FHA. In addition, in 2008 and 2009, the actual number of subprime loans in the database is very small. For example, the LPS database contains fewer than 500 subprime loans for 2008 and 2009 in the three states, and nationally, in LPS, there were fewer than 7,000 subprime loans in 2008 and fewer than 1,000 subprime loans in 2009.

[11] Haver Analytics, a New York-based provider of time series data for the economic research community, maintains more than 200 databases from government and private sources.

[12] More specifically, Haver bases its index on a question asked in the Federal Reserve Senior Loan Officer Opinion Survey. Prior to the second quarter of 2007, the Federal Reserve Board of Governors calculated the index. After that date, the Board discontinued the series. Haver picked up construction of the index, using survey data that the Board continues to report and a methodology similar to the Board's. Haver used earlier Board calculations to calibrate its own estimates.

[13] From 2006 through 2010, more financial institutions indicated that they were tightening standards than easing them.

nonetheless differences among the states. For example, the mean credit score for FHA borrowers in Pennsylvania is lower than the corresponding national mean in only one of the five FHA cohorts examined and then only by a small amount. In contrast, in New Jersey, the mean credit score for FHA borrowers is below the corresponding national mean for all five of the cohorts, and in four of the five cohorts, this difference is substantial (Table 3).

Table 3: Mean Credit Score by Loan Type, 2005 to 2009, U.S. and Three States

	2005	2006	2007	2008	2009
Prime*					
United States	**719.0**	**714.6**	**719.6**	**739.3**	**759.7**
Pennsylvania	717.3	711.4	715.0	734.5	757.3
New Jersey	713.3	708.9	716.8	735.8	756.6
Delaware	717.1	712.0	717.0	737.1	758.6
Subprime*					
United States	**614.0**	**610.7**	**601.7**	**604.6****	**649.8****
Pennsylvania	602.1	600.3	590.3	589.05**	653.08**
New Jersey	610.4	610.1	597.4	596.06**	645.29**
Delaware	601.4	601.3	594.5	619.05**	659**
FHA					
United States	**638.9**	**638.3**	**626.3**	**660.9**	**692.3**
Pennsylvania	646.6	647.7	630.5	657.2	692.2
New Jersey	622.2	615.1	606.3	648.0	688.8
Delaware	633.3	632.9	621.3	651.5	684.2

Source: Lender Processing Services Applied Analytics, Inc. (LPS)

* Data on first lien mortgage loans only include data on both home purchase and home refinance. The servicer database contains approximately 70 percent of prime loans and 19 percent of subprime loans.

** Subprime credit scores for 2008 and 2009 are based on a very small number of subprime mortgage loans both in the U.S. and in the three states (less than 500 subprime loans were made in 2008 and 2009 in all three states).

FHA Delinquency Status One Year After Closing Date

As the FHA portfolio has grown in market share in recent years, concerns over the FHA program's performance and viability have increased as rising delinquencies have depleted the program's reserve funds.[14] Here we provide information on the performance of the 2006, 2007, 2008, and 2009 cohorts of the FHA portfolio using LPS data. The results are in Tables 4 through 9 on pages 25 and 26. Tables 4, 6, and 8 provide national results for purchase, refinance, and all loans. Tables 5, 7, and 9 provide corresponding results for the Third District states. For each loan, the performance measure is the loan status one year from the closing date.[15]

Purchase Loans

Table 4 provides the loan status for all FHA purchase loans one year after the closing date for the United States as a whole, for each year from 2006 to 2009. In the 2006 cohort, 87.4 percent of loans were current or had been paid off at the one-year point, while 2.8 percent were 90 days or more delinquent, and 1.1 percent were in foreclosure. Performance was substantially weaker at the one-year point for the 2007 cohort: 4.5 percent were 90 days or more delinquent, and 1.7 percent were in foreclosure. This cohort is among the worst performing in the history of the FHA program.[16] Performance of the 2008 purchase cohort is better than that of 2007 and similar to the performance of the 2006 cohort. (The percentage of loans that are at least 90 days delinquent at the one-year point is a bit lower in the 2006 cohort than in the 2008 cohort, while the percentage of loans that are current or paid off is a bit higher in the 2008 cohort than in the 2006 cohort at the one-year point.) When comparing 2008 and 2006 performance, one might expect better performance in 2008, since credit scores were higher in that year. In this regard, the similarity in cohort performance between 2006 and 2008 is somewhat surprising and suggests that credit history is not the only factor affecting performance.[17]

Table 4 shows a dramatic improvement in the one-year performance of FHA purchase loans originated in 2009 compared with earlier years. Given that average credit scores for borrowers in the FHA program are higher in 2009, then to the extent that credit history is an important predictor of performance, it is not surprising that performance for that year improved sharply. However, a recent analysis conducted by the FHA suggests that delinquencies in 2009 purchase loans and nonstreamlined refinances that have moved

[14] See Federal Housing Administration, 2009.

[15] In LPS, status categories include current, paid off, 30 days past due, 60 days past due, 90 days past due, in foreclosure, in REO, sold out of REO, and loans sold or transferred to other servicers. The figures in Table 4 do not add to 100 percent since several status categories are not included in Table 4, including 30 days past due, 60 days past due, and loans transferred or sold to other servicers.

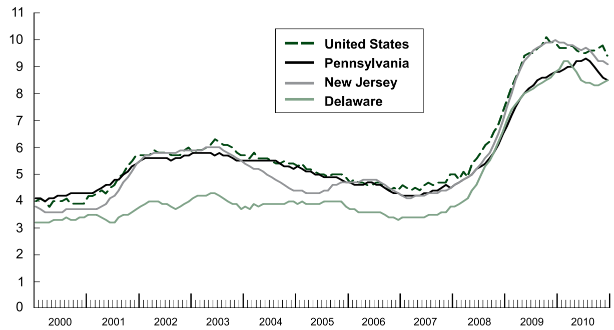
[16] See Federal Housing Administration, November 12, 2009.

[17] See the discussion at the start of the previous section. In particular, the timing of 2008 purchases, just prior to a period of high unemployment, may also have been a factor in the performance of these loans.

beyond the one-year point are increasing relatively rapidly.[18]

In the Third District states, as shown in Table 5, delinquency rates at the one-year point for the 2006, 2007, 2008, and 2009 FHA purchase cohorts follow the overall national pattern. In general, the delinquency rate for any given cohort tends to be higher than the national level in New Jersey and lower than the national level in Pennsylvania. (The 2007 to 2009 purchase cohorts in Delaware tend to perform less well than the corresponding national cohorts, but not to the same degree as in New Jersey.) Unemployment rates in New Jersey have been higher than in either Delaware or Pennsylvania in recent years and, with the onset of the housing crisis, have tracked the national average (Chart 4). Also, as shown in Table 3, FHA borrowers in New Jersey had lower mean credit scores than the other Third District states in 2006, 2007, and 2008. Performance converges for the Third District states in 2009.

Chart 4
Unemployment Rates in the U.S. and in the Third District States, 2000 to 2010



Source: BLS/Haver Analytics

Refinance Loans

Table 6 provides information on loan status at the national level one year after the closing date for FHA refinance loans in the 2006 through 2009 cohorts. The 2006 cohort performs considerably better than the 2007 and 2008 cohorts but not as well as the 2009 cohort. The 2009 cohort exhibits a sharp increase in performance over previous years for the nation as a whole, which is not surprising considering the earlier findings regarding mean borrower credit scores for the 2009 cohort.[19]

As in the nation as a whole, the performance of the 2007 and 2008 refinance cohorts at the one-year point was considerably weaker than those of the 2006 and 2009 cohorts in each of the Third District states (Table 7). For any given year, the New Jersey cohort did considerably worse on the performance indicators contained in Table 7 than the Pennsylvania cohort, while the Delaware cohort's performance tended to fall in between that of New Jersey and Pennsylvania.

Purchase vs. Refinance

At the national level, the performance of refinance and purchase loans was about the same in 2006. However, from 2007 to 2009, the performance of refinance loans was substantially worse than that of purchase loans at the one-year point. In 2008, many borrowers with conventional loans refinanced through the FHA program. A significant share of these borrowers may have done so in order to seek relief from the terms of subprime loans made during the middle years of the decade; such borrowers may have been particularly likely to face problems in meeting future loan obligations. (A similar phenomenon is also likely in the 2007 cohort, when large-scale refinancing from conventional to FHA loans also occurred.) The FHA attributes part of the gap in performance between purchase and refinance loans in 2009 to poor performance of streamlined refinance loans in that cohort.

---

[18] As in the case of 2008, high unemployment rates may be a factor here. A more complete discussion of recent cohort performance is available in the Federal Housing Administration's report, March 2011, pp. 20-22. In that document, Figure S2 and Figure S3 show that cumulative delinquency rates for any period of loan seasoning are higher for streamlined refinance loans than for other FHA loans, which include both purchase loans and nonstreamlined refinance loans. (The FHA has allowed "streamlined" loans as refinances on insured mortgages since the early 1980s. According to the FHA, streamlined refers only to the amount of documentation and underwriting that the lender needs to do and does not mean that there are no costs involved in the transaction. The FHA's basic requirements for a streamlined refinance loan are that (1) the mortgage to be refinanced must already be FHA insured; (2) the mortgage to be refinanced should be current (not delinquent); (3) the refinance must lower the borrower's monthly principal and interest payments; and (4) no cash may be taken out on mortgages refinanced using the streamlined refinancing process.) Nonetheless, Figure S2, which provides data for purchase and nonstreamlined refinance loans, shows a sharp rise in the 2009 cumulative delinquency rate beyond the one-year point, and since the large majority of 2009 loans represented in Figure S2 are purchase loans, this raises the possibility that the delinquency rates of home purchase loans are rising sharply beyond the one-year point.

[19] See the Federal Housing Administration's report, March 2011, p. 20 and Figures S1, S2, and S3 in that document. According to HUD, the FHA's streamlined refinance loans in 2009 have delinquency rates two times higher than those of the 2009 fully underwritten loans. Large numbers of these streamlined refinance loans came from the 2007 and 2008 books and many were funded with seller down payments. The FHA streamlined refinance loans in 2009 were probably taken out to take advantage of lower mortgage interest rates, which generally makes them less risky than would have been the case without refinancing, although this remains a risky group of loans.

Table 4: FHA Home Purchase, United States				
Origination Year	**% 90 Days Delinquent (not in foreclosure)**	**% in Foreclosure**	**% in REO or Sold Out of REO**	**% of Loans Current or Paid Off at One Year Point**
2006	2.8	1.1	0.4	87.4
2007	4.5	1.7	0.4	82.4
2008	3.2	1.1	0.1	88.4
2009	0.8	0.3	0.0	95.3

Source: Lender Processing Services Applied Analytics, Inc. (LPS)

Table 5: FHA Home Purchase, Third District States												
Origination Year	**% 90 Days Delinquent (not in foreclosure)**			**% in Foreclosure**			**% in REO or Sold Out of REO**			**% of Loans Current or Paid Off at One-Year Point**		
	PA	**NJ**	**DE**	**PA**	**NJ**	**DE**	**PA**	**NJ**	**DE**	**PA**	**NJ**	**DE**
2006	1.9	3.4	2.3	0.9	2.1	1.1	0.0	0.0	0.0	90.0	83.8	85.9
2007	3.0	5.3	5.1	1.6	5.1	1.4	0.0	0.0	0.1	86.2	77.0	83.9
2008	2.3	4.3	4.3	0.9	3.5	1.3	0.0	0.0	0.0	90.1	83.8	85.5
2009	0.7	1.1	1.0	0.3	0.8	0.6	0.0	0.0	0.0	95.6	94.2	93.5

Source: Lender Processing Services Applied Analytics, Inc. (LPS)

Table 6: FHA Home Refinance, United States				
Origination Year	**% 90 Days Delinquent (not in foreclosure)**	**% in Foreclosure**	**% in REO or Sold Out of REO**	**% of Loans Current or Paid Off at One-Year Point**
2006	2.4	1.0	0.3	87.5
2007	4.0	1.8	0.3	81.1
2008	5.0	1.9	0.2	82.3
2009	2.1	1.0	0.0	90.1

Source: Lender Processing Services Applied Analytics, Inc. (LPS)

Table 7: FHA Home Refinance, Third District States												
Origination Year	**% 90 Days Delinquent (not in foreclosure)**			**% in Foreclosure**			**% in REO or Sold Out of REO**			**% of Loans Current or Paid Off at One-Year Point**		
	PA	**NJ**	**DE**	**PA**	**NJ**	**DE**	**PA**	**NJ**	**DE**	**PA**	**NJ**	**DE**
2006	1.0	2.6	2.0	0.7	1.3	0.0	0.1	0.0	0.0	89.4	84.1	90.7
2007	3.3	4.5	4.6	1.6	4.4	1.7	0.1	0.1	0.0	82.0	72.8	76.0
2008	3.8	6.6	5.1	1.2	4.0	1.4	0.0	0.0	0.0	84.3	75.8	82.0
2009	1.3	2.3	1.6	0.5	2.0	0.9	0.0	0.0	0.0	92.7	88.6	91.5

Source: Lender Processing Services Applied Analytics, Inc. (LPS)

Table 8: Overall FHA, United States				
Origination Year	% 90 Days Delinquent (not in foreclosure)	% in Foreclosure	% in REO or Sold Out of REO	% of Loans Current or Paid Off at One-Year Point
2006	2.6	1.0	0.3	87.7
2007	4.3	1.7	0.3	82.1
2008	4.0	1.5	0.2	85.9
2009	1.4	0.6	0.1	93.4

Source: Lender Processing Services Applied Analytics, Inc. (LPS)

Table 9: Overall FHA, Third District States												
Origination Year	% 90 Days Delinquent (not in foreclosure)			% in Foreclosure			% in REO or Sold Out of REO			% of Loans Current or Paid Off at One-Year Point		
	PA	NJ	DE	PA	NJ	DE	PA	NJ	DE	PA	NJ	DE
2006	1.7	3.1	2.3	0.8	1.7	0.7	0.0	0.0	0.0	89.8	83.9	87.2
2007	3.1	5.0	5.1	1.6	4.6	1.6	0.0	0.0	0.1	84.8	74.4	80.4
2008	3.1	6.0	5.0	1.0	3.8	1.5	0.0	0.0	0.0	87.6	78.8	83.3
2009	1.0	1.9	1.4	0.4	1.4	0.7	0.0	0.0	0.0	94.3	90.9	92.5

Source: Lender Processing Services Applied Analytics, Inc. (LPS)

Conclusion and Implications

This report provides useful background for gauging the quality and performance of the 2006 through 2009 borrower cohorts in the FHA program nationally, as well as in Pennsylvania, New Jersey, and Delaware. In recent years, with the growth of the FHA portfolio as the housing crisis took hold, and with the accompanying rise in delinquency rates, concerns about the continued sustainability of the FHA program have developed. However, while the growth of the FHA's portfolio presents risks to the program, the data presented here on borrowers' mean credit scores would suggest that the credit profiles of recent borrowers are an improvement over those during the worst years of the housing crisis. Borrower quality, as measured by average cohort credit scores, was superior for FHA cohorts compared with subprime cohorts even during the subprime heyday, and for FHA's 2009 cohort, the mean credit score was in traditional prime territory.

However, the findings in this report do not suggest that concerns about FHA performance are unwarranted or that diligence in monitoring this performance is not necessary. Given the large market share of the FHA portfolio,[20] persistent high unemployment, and the possibly changing role of the FHA program as the housing market stabilizes, continued timely monitoring of the program's borrower quality and loan performance is crucial.

The findings presented here are interesting for other reasons as well. First, they suggest that borrower credit quality is not all that matters for performance of the FHA program. For example, while credit quality, as indicated by credit scores, appears to be stronger in 2008 than in 2006, loan performance at the 12-month point was about the same in 2008 for purchase loans but was actually worse in 2008 for refinance loans. This suggests that other factors play a role as well; it is likely that unemployment rates and housing market conditions were major factors affecting the comparative performance of these cohorts. In addition, the data presented for the Third District states show that the national

[20] The FHA accounted for more than one-fifth of total mortgage originations in 2009, a steep increase from its 2 to 3 percent market share in 2006, according to data from HMDA.

performance numbers for the FHA portfolio do not necessarily apply to local areas and, furthermore, that even in a relatively small geographic area, such as the Third District states, performance can vary considerably, presumably because of differences in local housing markets and economic conditions.

How the performance trends of the FHA program will develop over the long term, after the housing crisis has abated, remains to be seen. As in the past, it is likely that long-term economic trends — in particular, unemployment — and the performance of the housing market will affect that performance. As the housing crisis fades and the recovery plays out, the FHA program will continue to be an important topic for economic research for those who seek to understand the functioning of the housing market.

REFERENCES

Department of Housing and Urban Development. "FHA Issues Annual Financial Status Report to Congress," HUD Press Release (November 17, 2010); available at http://portal.hud.gov/hudportal/HUD?src=/press/press_releases_media_advisories/2010/HUDNo.10-252.

Federal Housing Administration. "MMIF Programs Quarterly Report to Congress for FY 2010 Q4," (March 2011); available at http://www.hud.gov/offices/hsg/rmra/oe/rpts/rtc/fhartc_q4_2010.pdf.

Federal Housing Administration. "Annual Management Report Fiscal Year 2009," (2009); available at http://www.hud.gov/offices/hsg/fhafy09annualmanagementreport.pdf.

Federal Housing Administration. "Annual Report to Congress Regarding the Financial Status of the FHA Mutual Mortgage Insurance Fund," (November 12, 2009); available at
http://online.wsj.com/public/resources/documents/FHAInsuranceStatus1112.pdf.

Newburger, Harriet B. "FHA Lending: Recent Trends and Their Implications for the Future,"
Federal Reserve Bank of Philadelphia Community Development Discussion Paper (forthcoming).

Timiraos, Nick. "Housing Agency Reserves Fall Far Below Minimum," *Wall Street Journal*.
(November 13, 2009); available athttp://online.wsj.com/article/SB125805015607445691.html.

FEDERAL RESERVE BANK
OF PHILADELPHIA

Ten Independence Mall
Philadelphia, PA 19106-1574

www.philadelphiafed.org