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United States Government Accountability Office
Washington, DC 20548

December 16, 2009

The Honorable Carolyn B. Maloney
Chair
Joint Economic Committee
House of Representatives

The Honorable Charles E. Schumer
Vice Chairman
Joint Economic Committee
United States Senate

Subject: *Loan Performance and Negative Home Equity in the Nonprime Mortgage Market*

As we reported to you in July 2009, the number of nonprime mortgage originations (including subprime and Alt-A loans) grew rapidly from 2000 through 2006, a period during which average house prices appreciated dramatically.[1] In dollar terms, the nonprime share of mortgage originations rose from about 12 percent ($125 billion) in 2000 to approximately 34 percent ($1 trillion) in 2006. These mortgages have been associated with what was subsequently recognized as a speculative housing bubble. As house prices subsequently fell, the subprime and Alt-A market segments contracted sharply, and very few nonprime originations were made after mid-2007. Borrowers who had obtained nonprime mortgages earlier in the decade increasingly fell behind on their mortgage payments, helping to push default and foreclosure rates to historical highs.

Economic conditions and a weak housing market have contributed to the increase in troubled loans. In particular, falling house prices have left many borrowers in a negative equity position—that is, their mortgage balances exceed the current value of their homes. Negative equity makes borrowers more vulnerable to foreclosure by, among other factors, limiting their ability to sell or refinance their homes in the event they cannot stay current on their mortgage payments.

To inform congressional decision making about efforts to address problems in the mortgage market, you requested that we examine the evolution and condition of the market for nonprime loans. On July 28, 2009, we provided you with an interim report on certain characteristics of nonprime loans and borrowers, and the performance of nonprime mortgages originated from 2000 through 2007 (the last year in which substantial numbers of nonprime mortgages were made) as of

[1]See GAO, *Characteristics and Performance of Nonprime Mortgages*, GAO-09-848R (Washington, D.C.: July 28, 2009).

March 31, 2009. This report (1) provides information on the performance of these nonprime loans as of June 30, 2009, and describes forecasts made by others of future loan performance; and (2) examines the extent of negative home equity among nonprime borrowers in selected metropolitan areas and nationwide. In addition, enclosure VI describes the preliminary results of our analysis of the demographic characteristics of nonprime borrowers—including race and ethnicity—whose loans originated in 2005.[2] We identified these characteristics by merging loan-level records from two data sources. This report also provides supplemental information on the performance of nonprime mortgages by annual loan cohort, product type, Census division, state, and congressional district. This supplemental information is presented in enclosures I through IV.

As agreed with your offices, in a final report we will provide information on the influence of nonprime loan and borrower characteristics and economic conditions on the likelihood of mortgage default and foreclosure. We will also describe the features and limitations of primary sources of data on nonprime mortgage performance and borrower characteristics. In addition, the final report will update information on the performance of nonprime mortgages and provide additional analysis of the characteristics of nonprime borrowers.

To conduct our work, we analyzed data from LoanPerformance's (LP) Asset-backed Securities database for nonprime loans originated from 2000 through 2007.[3] The database contains loan-level data on the majority of nonagency securitized mortgages in subprime and Alt-A pools.[4] For example, for the period 2001 through July 2007 the LP database contains information covering, in dollar terms, an estimated 87 percent of securitized subprime loans and 98 percent of securitized Alt-A loans. Research has found that nonprime mortgages that were not securitized (i.e., mortgages that lenders held in their portfolios) may have different characteristics and performance histories than those that were securitized. For purposes of our analysis, we defined a subprime loan as a loan in a subprime pool and an Alt-A loan as a loan in an Alt-A pool.[5] We focused our analysis on first-lien purchase and refinance mortgages for one- to four-family residential units. For certain analyses, we supplemented the LP data with data on house prices from the Federal Housing Finance Agency (FHFA) and Standard &

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[2]Our analysis was based on a 2 percent random sample of nonprime mortgages from 2005.

[3]LP is a unit of First American CoreLogic, Incorporated.

[4]Nonagency mortgage-backed securities (MBS), also known as private-label MBS, are backed by nonconforming conventional mortgages securitized primarily by investment banks. Nonconforming mortgages are those that do not meet the purchase requirements of Fannie Mae or Freddie Mac because they are too large or do not meet their underwriting criteria. About 75 percent of subprime and Alt-A mortgages originated from 2001 through 2007 were securitized.

[5]The LP database has a loan-level indicator for loan class (i.e., subprime or Alt-A), but it is not well populated. Therefore, we used the pool-level classification. According to mortgage researchers, some of the loans in subprime pools may not be subprime loans, and some of the loans in Alt-A pools may not be Alt-A loans.

Poor's (S&P)/Case-Shiller indexes, and data on borrower characteristics from the Home Mortgage Disclosure Act (HMDA) data set.

To examine the recent and expected performance of nonprime mortgages, we calculated the number and percentage of mortgages that were in different performance categories—for example, current (up-to-date on payments), delinquent (30 to 89 days behind), in default (90 or more days behind), in the foreclosure process, or having completed the foreclosure process as of June 30, 2009.[6] We classified mortgages in default or in the foreclosure process as "seriously delinquent." We also examined mortgage performance by loan cohort, loan type, and geographic area, including Census divisions, states, and congressional districts.[7] For detailed information on the performance of nonprime loans by these geographic areas, see enclosures III and IV. We also reviewed select studies containing forecasts of the performance of the mortgage market and interviewed the authors of those studies. We focused on four nonproprietary forecasts conducted in 2008 or 2009 that we identified through literature searches and discussions with industry researchers.

To examine the extent of negative equity among nonprime borrowers, we used the LP data and house price indexes from FHFA and S&P/Case-Shiller. More specifically, we used the indexes to adjust the appraised value of each home at loan origination to an estimated value as of June 30, 2009. We then subtracted the unpaid mortgage balance as of that date from the house value to estimate the borrower's home equity. We used two different indexes for these calculations because they offer different advantages. To estimate negative equity nationwide, we used the FHFA All-Transactions House Price Index (FHFA index) because it provides the broadest geographic coverage.[8] Because the FHFA index likely understates average house price declines experienced by nonprime borrowers from 2005 through 2008, our estimates of negative equity using this index are also likely to be understated. For estimates of negative equity in specific metropolitan areas, we used the S&P/Case-Shiller Tiered Price Indices (S&P/Case-Shiller index) because it uses data from a broader range of properties than the FHFA index and includes separate indexes for homes in different price ranges within a

[6]Unless otherwise noted, we treat delinquent loans, loans in default, and loans in the foreclosure process as mutually exclusive categories. We considered a loan to have completed the foreclosure process if it was in real estate-owned status as of June 30, 2009, or was paid off after being either 90 or more days delinquent, in the foreclosure process, or in real estate-owned status.

[7]A loan cohort is a group of loans that originated in the same year. For a description of our methodology for estimating performance by congressional district, see GAO-09-848R.

[8]The FHFA index, comprising separate indexes for 384 metropolitan areas, is based on sales and appraisal data for properties with mortgages purchased or securitized by Fannie Mae or Freddie Mac (conforming mortgages). To be eligible for purchase by these entities, loans (and borrowers receiving the loans) must meet specified requirements.

metropolitan area.[9] See enclosure V for a detailed description of the methodology we used to estimate negative equity and key differences between the two sets of house price indexes.

We tested the reliability of the data used in this report by reviewing documentation on the process the data providers use to collect and ensure the reliability and integrity of their data, and by conducting reasonableness checks on data elements to identify any missing, erroneous, or outlying data. We also interviewed LP representatives to discuss the interpretation of various data fields. We concluded that the data we used were sufficiently reliable for our purposes. We conducted this engagement in Washington, D.C., from August 2009 through November 2009 in accordance with all sections of GAO's Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the evidence obtained provides a reasonable basis for our findings based on our audit objectives.

Results in Brief

The performance of mortgages in the nonprime market segment worsened during the second quarter of 2009 (April 1 through June 30, 2009), as the number of loans that completed the foreclosure process or became seriously delinquent increased from the previous quarter. For example, 147,000 loans completed the foreclosure process in the second quarter, an increase of 9 percent from the first quarter, and the number of seriously delinquent loans grew by about 48,000, a 4 percent increase. The growth in serious delinquencies, coupled with a decline in the total number of active loans due to prepayments and completed foreclosures, increased the serious delinquency rate from 23 percent to 26 percent during the second quarter. Although serious delinquencies were most prevalent among subprime borrowers and for adjustable-rate products, serious delinquencies in the second quarter of 2009 were growing most rapidly for Alt-A borrowers and fixed-rate mortgages. The number of nonprime loans that were seriously delinquent rose by approximately 2 percent (16,000) in the subprime market, compared with 7 percent (32,000) in the Alt-A market. For fixed-rate Alt-A loans, the corresponding increase was 11 percent (13,000). Forecasts made by others suggest that weaknesses in the nonprime mortgage market will persist, primarily due to expected declines in home prices.

Our analysis of borrowers with active nonprime mortgages originated from 2000 through 2007 indicates that a substantial proportion had negative equity in their homes as of June 30, 2009. Our estimates using the S&P/Case-Shiller index for 16 metropolitan areas showed that the percentage of borrowers with negative equity ranged from about 9 percent (Denver, Colorado) to more than 90 percent (Las

[9]The S&P/Case-Shiller index, comprising separate indexes for 17 metropolitan areas, is based on sales data for homes purchased with both conforming and nonconforming mortgages.

Vegas, Nevada). Our estimates also indicate that in the 16 metropolitan areas we reviewed, nonprime borrowers who obtained their mortgages to purchase a home were more likely to have negative home equity than those who refinanced their mortgages. Using the FHFA index, we estimated that one-quarter of nonprime borrowers with active loans nationwide had negative equity in their homes as of June 30, 2009. We also found that the incidence of negative equity was highest among borrowers who obtained their mortgages in 2005, 2006, and 2007.

Background

The nonprime mortgage market has two segments:

- *Subprime*—Generally serves borrowers with blemished credit histories, and the loans feature higher interest rates and fees than prime loans.

- *Alt-A*—Generally serves borrowers whose credit histories are close to prime, but the loans have one or more high-risk features such as limited documentation of income or assets or the option of making monthly payments that are lower than would be required for a fully amortizing loan.

In both of these categories, two types of loans are common: fixed-rate mortgages, which have unchanging interest rates, and adjustable-rate mortgages (ARM), which have interest rates that can adjust periodically based on changes in a specified index. Specific types of ARMs are prevalent in each market segment. "Short-term hybrid ARMs" accounted for most subprime mortgage originations in recent years.[10] These loans have a fixed interest rate for an initial period but then "reset" to an adjustable rate for the remaining term of the loan. In the Alt-A segment, "payment-option ARMs" are a common adjustable-rate product.[11] For an initial period of typically 5 years, or when the loan balance reaches a specified cap, this product provides the borrower with multiple payment options each month, including minimum payments that are lower than what would be needed to cover any of the principal or all of the accrued interest. After the initial period, payments are "recast" to include an amount that will fully amortize the outstanding balance over the remaining loan term.

Nonprime mortgages, like all mortgages, can fall into any one of several payment categories:

- *Current*—The borrower is meeting scheduled payments.

[10]More specifically, short-term hybrid ARMs represented about 70 percent of the subprime mortgages originated from 2000 through 2007.

[11]Payment-option ARMs accounted for about 17 percent of the Alt-A mortgages originated from 2000 through 2007.

- *Delinquent*—The borrower has missed one or more scheduled monthly payments.

- *Default*—The borrower is 90 or more days delinquent.[12] At this point, foreclosure proceedings against the borrower become a strong possibility.

- *Foreclosure*—The borrower has been delinquent for more than 90 days, and the lender has elected to foreclose in what is an often lengthy process with several possible outcomes. For instance, the borrower may sell the property or the lender may repossess the home.

- *Prepaid*—The borrower has paid off the entire loan balance before it is due. Prepayment often occurs as a result of the borrower selling the home or refinancing into a new mortgage.

In this report, we describe mortgages in default or in the foreclosure process as "seriously delinquent."

The amount of equity a homeowner has in a mortgaged property may influence how well the mortgage performs. In general, higher levels of home equity are associated with lower probabilities of default and foreclosure. Equity is a homeowner's financial interest in a property, or the difference between the value of a property and the amount still owed on the mortgage. Typically, home equity increases over time as the mortgage balance is paid down and home values appreciate. However, if the home value falls below the amount owed on the mortgage, the borrower will be in a position of negative equity. Borrowers with nonprime loans may be especially vulnerable to negative equity because they typically make small down payments and, as previously discussed, may have loans with payment options that defer payment of accrued interest, thereby increasing the outstanding loan balance.

House price appreciation or depreciation in a geographic area is commonly measured by changes in a house price index. Such indexes are based on the sales prices or appraised values for the same housing units over time. FHFA and S&P/Case-Shiller produce two widely used house price indexes that use this method.

The Performance of Nonprime Mortgages Deteriorated into Mid-2009, and Continuing Deterioration Appears Likely

The performance of mortgages in the nonprime market segment worsened during the second quarter of 2009 (April 1 through June 30, 2009), as the number of loans that completed the foreclosure process or became seriously delinquent grew from

[12]There is no uniform definition of default across the lending industry. For purposes of this report, we use the definition provided.

the previous quarter.[13] Although serious delinquencies were most prevalent among subprime borrowers and for adjustable-rate products, serious delinquencies in the second quarter of 2009 were growing most rapidly for Alt-A borrowers and fixed-rate mortgages. Forecasts made by others suggest that weaknesses in the nonprime mortgage market will persist, primarily due to expected declines in home prices.

Foreclosures and Serious Delinquencies Increased Across Market Segments and Product Types

As of June 30, 2009, approximately 1.7 million of the 14.4 million nonprime loans (12 percent) originated from 2000 through 2007 had completed the foreclosure process (see fig. 1). Of that 1.7 million, about 147,000 loans completed foreclosure in the second quarter of 2009, an increase of 9 percent from the first quarter. Subprime mortgages accounted for about 89,000, or about 61 percent, of the completed foreclosures in the second quarter. Although foreclosures and serious delinquencies increased, the number of mortgage prepayments also grew. As of June 30, 2009, more than half of nonprime mortgages (54 percent or 7.8 million) were prepaid as of June 30, 2009.[14] Of that 7.8 million, approximately 154,000 mortgages were prepaid in the second quarter of 2009, an increase of about 2 percent from the previous quarter.

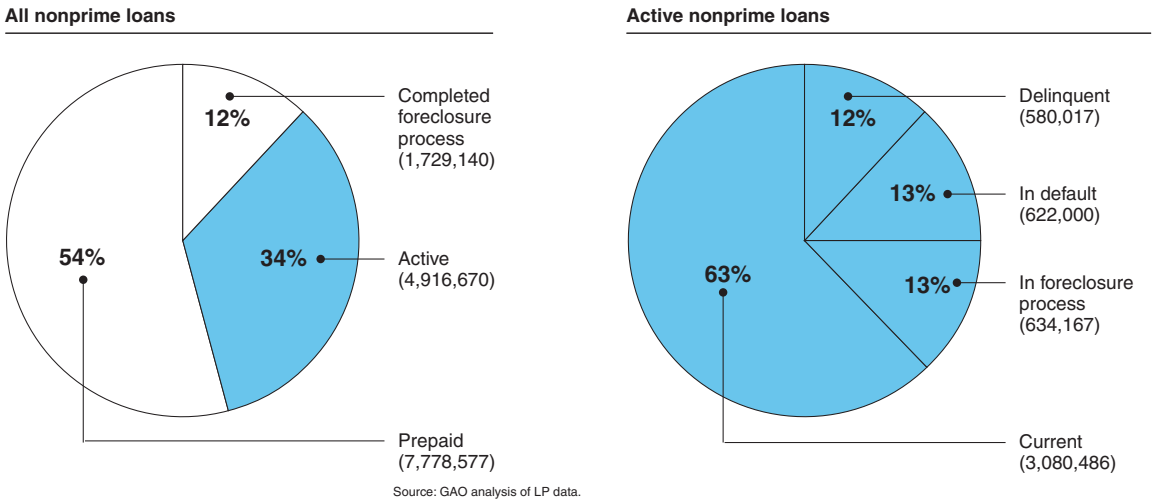
Other measures of the performance of nonprime mortgages have also weakened since the first quarter of 2009. Of the 4.9 million nonprime loans still active as of the second quarter of 2009, approximately 3.1 million (63 percent) were current (i.e., borrowers were meeting scheduled payments), down by about 328,000 (10 percent) from the previous quarter. During the second quarter, the number of seriously delinquent loans—loans either in default or in the foreclosure process—grew from 1,208,000 to 1,256,000 (4 percent). This growth, coupled with a decline in the total number of active nonprime loans due to prepayments and completed foreclosures, increased the serious delinquency rate from 23 percent to 26 percent during the second quarter.[15]

[13]As previously noted, the data we used for our analysis do not cover the entire nonprime market but do cover the large majority of nonagency securitized mortgages within that market.

[14]Because many of these loans were prepaid as a consequence of refinancing, the number of loans reported exceeds the number of borrowers.

[15]Although defaults and foreclosures also increased in other market segments, the serious delinquency rate for the mortgage market as a whole was substantially lower. According to the Mortgage Bankers Association, the serious delinquency rate for the broader mortgage market was approximately 8 percent as of the end of the second quarter of 2009.

Figure 1: Percentage of All Nonprime Loans and All Active Nonprime Loans Originated from 2000 through 2007 by Performance Status, as of June 30, 2009



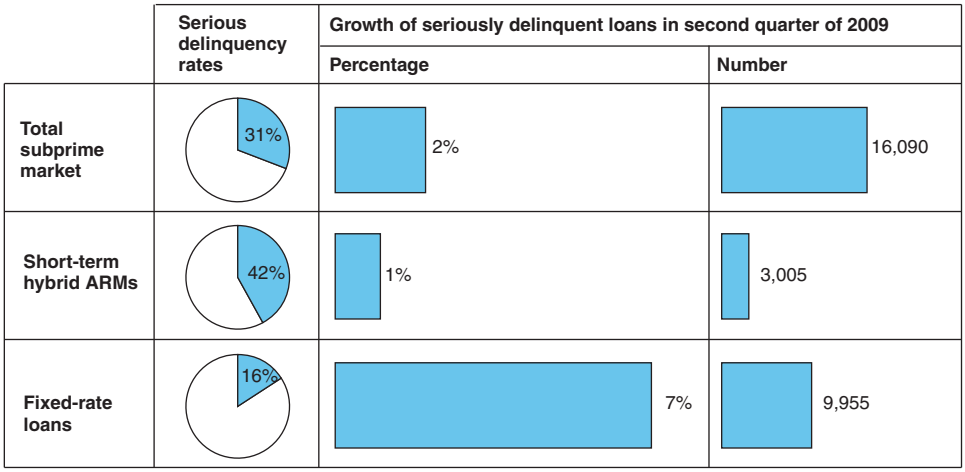
Source: GAO analysis of LP data.

Note: We considered loans to be delinquent if borrowers were 30 to 89 days late on their mortgage payments. We considered loans to be in default if borrowers were 90 or more days late. Percentages in graphs may not add to 100 percent due to rounding.

Although the absolute number of seriously delinquent loans was higher in the subprime market than in the Alt-A market, the rate of growth in serious delinquencies in the second quarter was higher for Alt-A loans. At the end of the second quarter of 2009, about 791,000 subprime loans (31 percent) and 466,000 Alt-A loans (20 percent) were seriously delinquent. In that quarter, serious delinquencies grew by approximately 16,000 loans (2 percent) in the subprime market and 32,000 loans (7 percent) in the Alt-A market.

Additionally, while certain ARM products had the highest serious delinquency rates as of the end of the second quarter, the rate of growth in serious delinquencies was higher for fixed-rate mortgages in that quarter. For example, in the subprime market, 42 percent of short-term hybrid ARMs were seriously delinquent as of the end of the second quarter, compared with 16 percent of fixed-rate mortgages (see fig. 2). However, while the number of short-term hybrid ARMs that were seriously delinquent increased by 1 percent (from about 584,000 to 587,000) over the quarter, the corresponding increase for subprime fixed-rate loans was 7 percent (from about 142,000 to 152,000).

Figure 2: Subprime Serious Delinquency Rates as of June 30, 2009, and Growth of Seriously Delinquent Subprime Loans in the Second Quarter of 2009

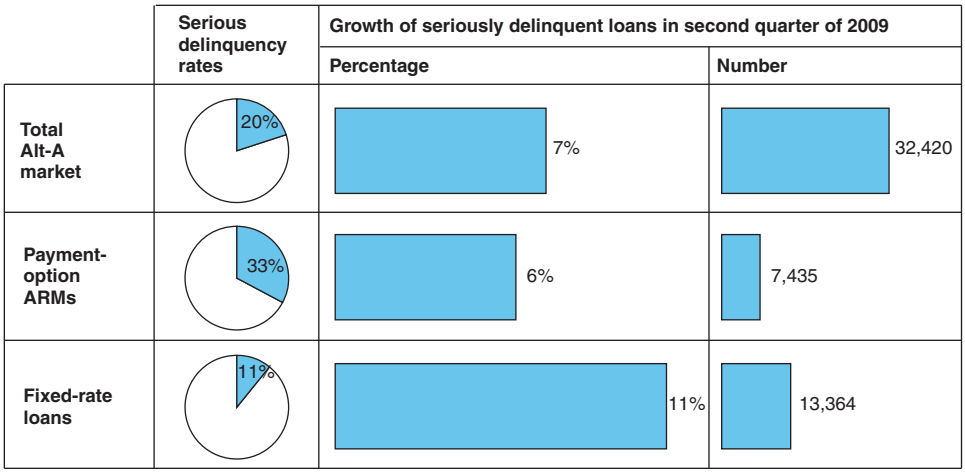


Source: GAO analysis of LP data.

Note: We considered loans to be seriously delinquent if borrowers were 90 days or more late on their mortgage payments or in the foreclosure process.

In the Alt-A market, 33 percent of payment-option ARMs were seriously delinquent as of June 30, 2009, compared with 11 percent of fixed-rate loans (see fig. 3). But while the number of payment-option ARMs that were seriously delinquent grew by 6 percent (from somewhat over 122,000 to about 130,000), the corresponding increase for fixed-rate loans was 11 percent (from about 118,000 to about 131,000).

Figure 3: Alt-A Serious Delinquency Rates as of June 30, 2009, and Growth of Seriously Delinquent Alt-A Loans in the Second Quarter of 2009



Source: GAO analysis of LP data.

Note: We considered loans to be seriously delinquent if borrowers were 90 days or more late on their mortgage payments or in the foreclosure process.

Enclosures I and II provide more detailed information about the performance of nonprime loans by cohort year and product type. For detailed data on the performance of nonprime loans by Census division, state, and congressional district see enclosures III and IV.

Forecasters Predict That the Weak Performance of Nonprime Loans Will Persist, Largely Due to Declining Home Prices

The four studies we reviewed that sought to forecast the performance of the U.S. mortgage market generally predicted that elevated levels of default and foreclosure will persist.[16] The studies differed in the methods they used to predict future performance, and none focused specifically on the nonprime market, although 3 included forecasts of the subprime segment of the nonprime market.[17]

Two studies of the subprime market segment estimated that the number of these loans entering foreclosure annually would gradually decline after peaking in 2008 but would likely remain in the hundreds of thousands per year. For example, a Credit Suisse study estimated that 1.9 million subprime loans would enter foreclosure between the third quarter of 2008 and the end of 2012.[18] (The study estimated that about 1.1 million of these foreclosures would occur from 2010 through 2012.) While none of the four studies we reviewed addressed the Alt-A market specifically, the authors told us that default and foreclosure rates in that market segment have yet to peak. One author explained this phenomenon by noting that Alt-A borrowers often had higher levels of initial equity compared with subprime borrowers, which provided a larger cushion against falling home prices.

Among the factors contributing to future defaults and foreclosures, forecasters identified declining home prices as the most important. Additionally, forecasters

[16]Ellen Schloemer, Wei Li, Keith Ernst, and Kathleen Keest, *Losing Ground: Foreclosures in the Subprime Market*, Center for Responsible Lending (December 2006) and Center for Responsible Lending, *Updated Projections of Subprime Foreclosures in the United States and their Impact on Home Values and Communities* (August 2008); Rod Dubitsky, Larry Yang, Stevan Stevanovic, and Thomas Suehr, *Foreclosure Update: Over 8 Million Foreclosures Expected*, Credit Suisse (December 4, 2008); Jan Hatzius and Michael Marschoun, *Global Economics Paper No. 177*, Goldman Sachs (January 13, 2009); and Shane Sherlund, *The Past, Present, and Future of Subprime Mortgages*, Finance and Economics Discussion Series 2008-63, Federal Reserve Board (November 2008).

[17]Schloemer and others, *Losing Ground: Foreclosures in the Subprime Market*, provides a cumulative estimate of subprime foreclosures for the nation, state, and metropolitan statistical areas. Dubitsky and others, *Foreclosure Update: Over 8 Million Foreclosures Expected*, provides baseline yearly estimates of foreclosure starts for the subprime market and the whole mortgage market, as well as estimates of the effects of unemployment and loan modifications on the whole mortgage market. Hatzius and Marschoun, *Global Economics Paper No. 177*, provides quarterly estimates of defaults for three house price scenarios for the whole market. Sherlund, *The Past, Present and Future of Subprime Mortgages*, provides yearly estimates of subprime foreclosure starts, as well as cumulative performance by loan vintage.

[18]Dubitsky and others, *Foreclosure Update*, 2.

indicated that factors affecting the affordability of mortgages—such as unemployment, loan recasts, and mortgage modifications—would also affect loan performance in coming years.

House Price Depreciation

We and others have reported on the strong statistical relationship between changes in house prices and the likelihood of mortgage defaults and foreclosures.[19] Falling house prices can result in negative home equity—that is, a mortgage balance that exceeds the current value of the property. Homeowners with negative equity may find it difficult to sell or refinance the property to avoid foreclosure. They may also have incentives to stop making mortgage payments to minimize their financial losses. Prior research suggests that negative equity is a necessary, but not sufficient, condition for foreclosure.[20] Besides having negative equity, borrowers who end up in foreclosure often experience a "trigger event," such as job loss or divorce that reduces their ability to make mortgage payments.

Three of the four forecasts we reviewed included the assumption that average house prices would continue to fall appreciably into 2010, resulting in a higher incidence and severity of negative equity among nonprime borrowers.[21] For example, one forecast assumed cumulative house price depreciation of 8.5 percent over the 3 year period ending in the last quarter of 2010, while another assumed a cumulative 15 percent decline over the 2 year period ending in mid-2010. On the basis of data from home purchases, S&P/Case-Shiller and FHFA have both reported that average house prices at the national level increased in the third quarter of 2009. However, several recent forecasts have projected house price declines in 2010.[22]

All of the forecasters indicated that house price changes will play a key role in future mortgage performance. For example, a study that simulated subprime mortgage performance found that the number of subprime defaults was more sensitive to house price trends than other explanatory variables. Similarly, the authors of a study addressing the entire mortgage market told us that anticipated

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[19]For example, GAO, *Home Mortgages: Provisions in a 2007 Mortgage Reform Bill (H.R. 3915) Would Strengthen Borrower Protections, but Views on Their Long-term Impact Differ*, GAO-09-741 (Washington, D.C.: July 31, 2009).

[20]For example, Christopher Foote, Kristopher Gerardi, and Paul S. Willen, *Negative Equity and Foreclosure: Theory and Evidence*, Public Policy Discussion Paper 08-3, Federal Reserve Board (June 5, 2008).

[21]The remaining study assumed an overall decrease in house prices but did not indicate specifically when prices would stop falling.

[22]For example, as of September 2009, IHS Global Insight was projecting a decline in the national FHFA house price index through the third quarter of 2010. Additionally, as of October 2009, Freddie Mac was projecting a decline in the national S&P/Case-Shiller index through the end of 2010.

house price declines accounted for about 80 percent of the defaults they were forecasting.

Factors Affecting Mortgage Affordability

Forecasters we spoke with noted several factors affecting the affordability of mortgage payments will influence the number of nonprime loans that will end in foreclosure over the next few years. These factors include job loss, mortgage recasts, and federal loan modification efforts.

- *Job loss*—Loss of employment is a common event that can lead to foreclosure because of its direct impact on a borrower's ability to make mortgage payments. All of the forecasts we reviewed acknowledged job loss as a contributor to mortgage defaults and foreclosures. However, three forecasts noted that the impacts of unemployment may be difficult to capture for several reasons, including the fact that unemployment data are aggregated and do not capture the effects of job losses on individual households. Further, the forecasts used older projections of unemployment in their analysis, many of which had predicted lower peaks, such as 8 percent unemployment by the end of 2009. Some more recent estimates suggest that unemployment rates will peak at around 10 percent in 2010, a level that one of the forecasts included in its worst-case scenario. As of November 2009, the unemployment rate was 10 percent.

- *Mortgage recasts*—Payment-option ARMs, a common Alt-A product, allow borrowers to make minimum payments for an initial period that are lower than needed to cover any of the principal or all of the accrued interest. After the initial period, payments are "recast" to include an amount that will fully amortize the outstanding balance over the remaining loan term. Consequently, payment-option ARMs can result in payment shock, especially if the borrower was making only the minimum payment. Although none of the forecasts we reviewed specifically attempted to model the impact of payment-option ARM recasts, the authors told us that recasts would likely lead to additional foreclosures for many Alt-A borrowers who may not be able to afford the higher payments. Large numbers of payment-option ARMs are scheduled to recast beginning in 2010.

- *Federal loan modification efforts*—Loan modifications involve making temporary or permanent changes to the term of the existing loan agreement and can include reducing the interest rate charged, extending the loan term, or implementing forbearance plans.[23] Loan modifications may prevent or delay foreclosures on nonprime mortgages by making mortgage payments more affordable. Under the Home Affordable Modification Program (HAMP), the

[23]With a forbearance plan, a lender agrees not to exercise the legal right of foreclosure if the borrower agrees to a payment plan that will resolve the borrower's deficiency for a set period of time.

Department of the Treasury (Treasury), Fannie Mae, and Freddie Mac will use up to $75 billion to encourage loan modifications. The authors of the studies we reviewed agreed that loan modifications had the potential to reduce future nonprime foreclosures, but some noted the difficulty of predicting an exact number. Treasury has estimated that up to 3 to 4 million borrowers who were at risk of default and foreclosure could be offered a loan modification under HAMP. However, as we reported in July 2009, Treasury's estimate reflects uncertainty created by data gaps and the need to make numerous assumptions, and therefore may be overstated.[24]

A Substantial Proportion of Nonprime Mortgage Borrowers Have Negative Home Equity

Our analysis of borrowers with active nonprime mortgages originated from 2000 through 2007 indicates that a substantial proportion had negative equity in their homes as of June 30, 2009. Our estimates using the S&P/Case-Shiller Tiered Price Indices (S&P Case-Shiller index) for 16 metropolitan areas showed that the percentage of borrowers with negative equity ranged from about 9 percent to more than 90 percent. Using the FHFA All-Transactions Index (FHFA index), we estimated that about one-quarter of nonprime borrowers with active loans nationwide had negative equity in their homes as of June 30, 2009.[25]

Estimates of Negative Equity in 16 Metropolitan Areas

To estimate the extent of negative equity among nonprime borrowers, we compared borrowers' outstanding balances on first-lien loans with the estimated values of their homes as of June 30, 2009.[26] Because of data limitations, we could not identify borrowers with multiple mortgaged properties. To the extent that some borrowers had more than one mortgaged property, our results may overstate the actual number of individual borrowers with negative home equity. For our estimates of negative equity for specific metropolitan areas, we used the S&P/Case-Shiller index—which includes separate indexes for homes in low, middle, and high price ranges within a metropolitan area—to adjust the appraised value of each home to an updated market value. The S&P/Case-Shiller index is available for 17 metropolitan areas.

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[24]GAO, *Treasury Actions Needed to Make the Home Affordable Modification Program More Transparent and Accountable*, GAO-09-837 (Washington, D.C.: July 2009).

[25]As previously noted, our estimates using the FHFA index likely understate the extent of negative equity. Across the 15 metropolitan areas for which the FHFA and S&P/Case-Shiller indexes use the same geographic boundaries, the estimated percentage of borrowers with negative equity was nearly two times higher using the S&P/Case-Shiller index compared with estimates using the FHFA index.

[26]Due to data limitations, our analysis did not account for any second liens that the borrowers had on their properties. To the extent that borrowers had second liens, our analysis may understate the extent of negative home equity.

We estimated the extent of negative home equity for nonprime borrowers with active loans in 16 of the 17 metropolitan areas covered by the S&P/Case-Shiller index.[27] As shown in table 1, we estimate that the metropolitan areas with the highest percentage of nonprime borrowers with negative home equity as of June 30, 2009, were Las Vegas, Nevada (94.3 percent); Phoenix, Arizona (89.4 percent); Miami, Florida (85.8 percent); and Minneapolis, Minnesota (80.6 percent). The metropolitan areas with the lowest percentages included Denver, Colorado (9.3 percent) and Portland, Oregon (12.7 percent). It is important to note that the 17 metropolitan areas covered by the S&P/Case-Shiller index may represent areas with higher proportions of negative equity than is generally found across the country. Seven of the 17 metropolitan areas are in states (California, Florida, Nevada, and Arizona) that in recent years experienced the most dramatic declines in house prices.

Table 1: Estimates of Negative Equity in Selected Metropolitan Areas Using the S&P/Case-Shiller Index, as of June 30, 2009

Metropolitan area	Number of nonprime borrowers with active loans	Estimated number with negative equity	Estimated percentage with negative equity
Las Vegas, NV	92,949	87,685	94.3
Phoenix, AZ	131,069	117,185	89.4
Miami, FL	225,355	193,360	85.8
Minneapolis, MN	49,435	39,841	80.6
Tampa, FL	85,641	67,343	78.6
San Diego, CA	86,499	62,160	71.9
Chicago, IL	128,929	86,523	67.1
Washington, DC	130,760	83,682	64.0
Los Angeles, CA	315,289	201,009	63.8
Atlanta, GA	122,302	73,001	59.7
San Francisco, CA	103,369	61,652	59.6
New York, NY	295,932	76,204	25.8
Seattle, WA	69,353	17,327	25.0
Boston, MA	54,844	12,670	23.1
Portland, OR	42,014	5,323	12.7
Denver, CO	60,280	5,583	9.3
Total	**1,994,020**	**1,190,548**	**59.7**

Source: GAO analysis of LP data and S&P/Case-Shiller index.

Note: As of November 2009, the S&P/Case-Shiller index did not include 2009 data for the Cleveland, Ohio metropolitan area. As a result, we did not estimate negative equity for that area.

Estimates of Negative Equity by Loan and Borrower Type

For the same 16 metropolitan areas examined above, we estimated the extent of negative home equity by loan class (subprime or Alt-A), loan purpose, loan product, and borrower type (owner occupant or nonowner occupant) using the S&P/Case-Shiller index. Our estimates of negative equity are as of June 30, 2009,

[27]As of November 2009 the S&P/Case-Shiller index did not include 2009 data for the Cleveland, Ohio metropolitan area. As a result, we did not estimate negative equity for that area.

and are for nonprime borrowers in the 16 metropolitan areas whose loans were active as of that date. We found that:

- Subprime borrowers were more likely than Alt-A borrowers to be in a negative equity position. We estimate that about 63 percent of subprime borrowers had negative home equity, compared with 57 percent of Alt-A borrowers.

- Borrowers who obtained a mortgage to purchase a home were more likely to have negative equity than those who refinanced an existing loan. Additionally, borrowers who refinanced their mortgages to convert their home equity into money for personal use (cash-out refinancings) were more likely to have negative equity than borrowers who refinanced without taking cash out. More specifically, we estimate that 68 percent of borrowers with purchase loans had negative home equity, compared with 55 percent of borrowers with cash-out refinance loans, and 50 percent of borrowers with no-cash-out refinance loans.

- Borrowers with adjustable-rate loans were more likely to have negative equity than borrowers with fixed-rate loans. For example, we estimate that 80 percent of borrowers with payment-option ARMs and 75 percent of borrowers with short-term hybrid ARMs were in a negative equity position. By comparison, an estimated 39 percent of borrowers with fixed-rate mortgages had negative home equity.

- Borrowers who were owner-occupants were somewhat more likely to have negative home equity than borrowers who were not owner-occupants (e.g., investors). More specifically, we estimate that 60 percent of owner-occupants were in a negative equity position, compared with 56 percent of non-owner-occupants.

Estimates of Negative Equity Nationwide

To estimate the extent of negative home equity nationwide, we used the FHFA index because it comprises separate indexes for 384 metropolitan areas covering approximately 84 percent of the U.S. population.[28] The FHFA index does not include data for homes with certain types of financing, including subprime mortgages. Partly for this reason, the FHFA index shows more modest declines in average house prices from 2005 through 2008, compared with the S&P/Case-Shiller index. As a result, our estimates using the FHFA index likely understate the extent of negative equity among nonprime borrowers.[29] See enclosure V for additional information about the major differences between the FHFA and

[28]We excluded nonprime loans on properties not in these metropolitan areas from our analysis. As a result, our estimates cover 4.5 million of the 4.9 million nonprime loans that were active as of June 30, 2009.

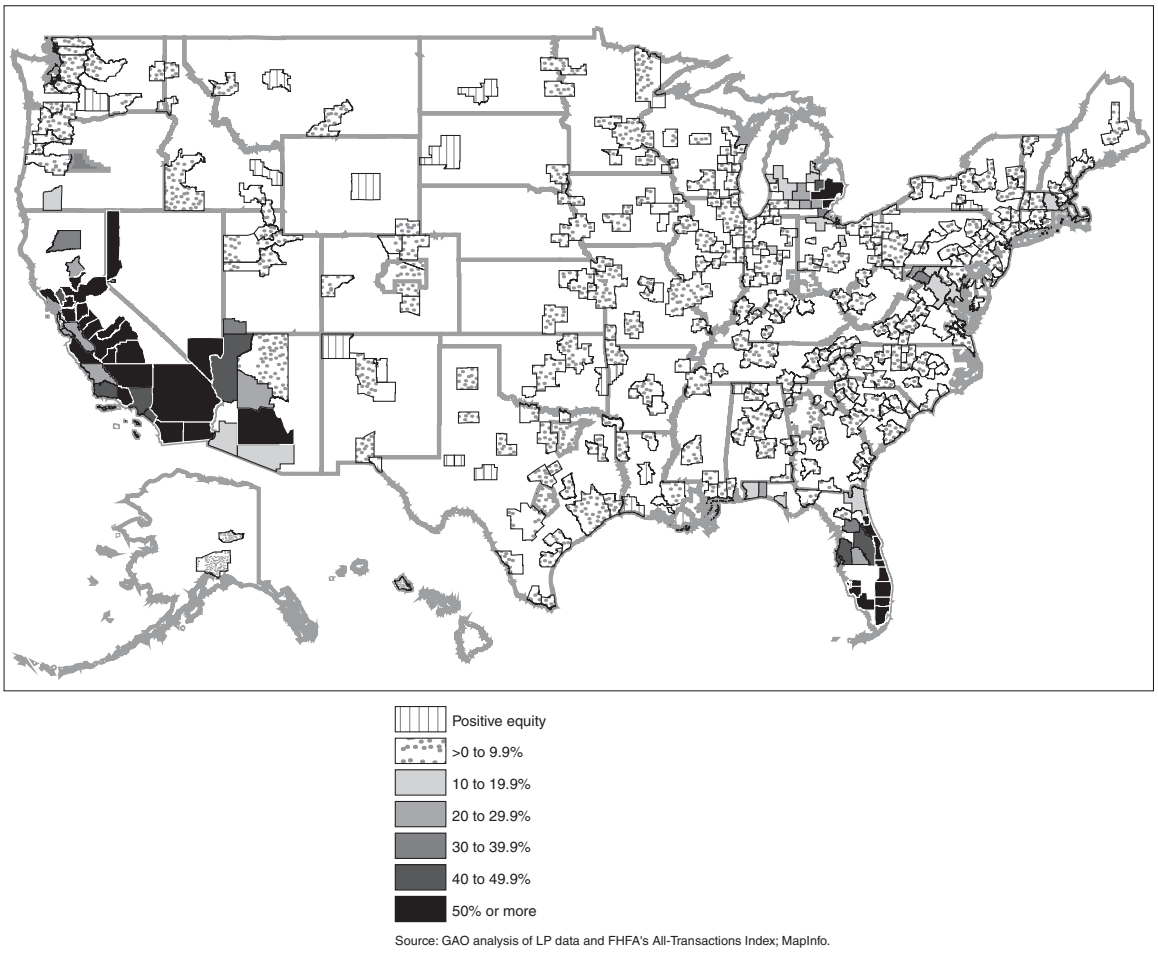
[29]To illustrate, across the 15 metropolitan areas for which the FHFA and S&P/Case-Shiller indexes use the same geographic boundaries, the estimated percentage of borrowers with negative equity was about 34 percent using the FHFA index and 66 percent using the S&P/Case-Shiller index.

S&P/Case-Shiller indexes and how using different indexes can affect estimates of negative equity.

Nationwide, we estimate that 25 percent of the borrowers who obtained nonprime mortgages from 2000 through 2007 and whose loans were active as of June 30, 2009, had negative home equity as of that date. The estimated proportion of nonprime borrowers in a negative equity position varied by location. We estimated that this proportion ranged from no negative equity in 20 metropolitan areas to more than 80 percent in 5 (see fig. 4).[30] The 35 metropolitan areas with proportions greater than 50 percent were located in five states: Arizona, California, Florida, Michigan, and Nevada.

[30]The five metropolitan areas were Merced, California (87.4 percent); Stockton, California (85.6 percent); Modesto, California (83.5 percent); Vallejo-Fairfield, California (83.4 percent); and Las Vegas-Paradise, Nevada (83.4 percent).

Figure 4: Estimated Percentage of Nonprime Borrowers with Negative Home Equity by Metropolitan Area Using the FHFA Index as of June 30, 2009



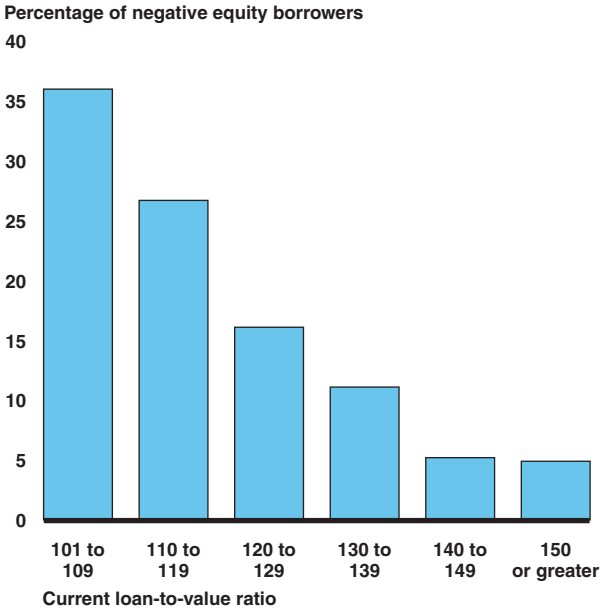
Source: GAO analysis of LP data and FHFA's All-Transactions Index; MapInfo.

Additionally, we estimate that 5.5 percent of borrowers with active nonprime loans had "near negative equity"—that is, home equity of 0 to 5 percent. Borrowers with near negative equity face similar challenges to borrowers with negative equity when selling or refinancing their homes because mortgage closing costs (e.g., lender fees and title charges) are generally between 3 to 5 percent of the value of the home.

Nationwide, we estimate that the total amount of negative equity (i.e., the difference between mortgage balances and estimated property values) was about $54.8 billion. Among borrowers in a negative equity position, the median borrower had negative equity of approximately $36,274. We estimate that 75 percent of borrowers in a negative equity position had negative home equity of more than $15,615 and 25 percent had negative home equity of more than $67,335. Another measure of negative equity is the ratio of the current loan balance to the current value of the property (current loan-to-value ratio). A current loan-to-value (LTV) ratio of more than 100 percent indicates negative equity in the property, with a higher ratio representing greater negative equity as a percentage of the property

value.[31] As of June 30, 2009, we estimate nearly 63 percent of nonprime borrowers with negative home equity had current LTV ratios of 101 to 119 percent, while about 5 percent had current LTV ratios of 150 percent or higher (see fig. 5).

Figure 5: Estimated Current LTV Ratios of Nonprime Borrowers with Active Loans Who Had Negative Home Equity as of June 30, 2009

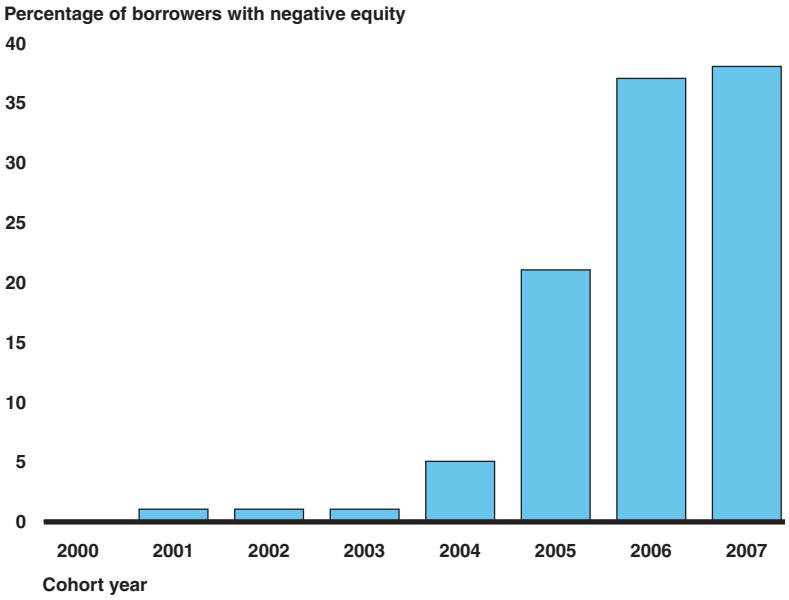


Source: GAO analysis of LP data and FHFA All-Transactions Index.

We also found that borrowers who obtained their loans later in the decade were more likely to have negative home equity than borrowers who obtained their loans earlier. This pattern reflects the greater home equity that earlier borrowers accumulated by paying down their loan balances and experiencing the home price appreciation that occurred in most of the country during the first half of the decade. We estimate that no more than 1 percent of borrowers with loans that originated from 2000 through 2003 and whose loans were still active as of June 30, 2009, were in a negative equity position as of that date (see fig. 6). In contrast, we estimate that 37 percent of borrowers with active loans that originated in 2007 had negative home equity as of that date.

[31]As discussed in our July 2009 report, average LTV ratios at loan origination peaked in 2006 at about 86 percent for subprime mortgages and 82 percent for Alt-A mortgages. See GAO-09-848R.

Figure 6: Estimated Percentage of Nonprime Borrowers with Active Loans Who Had Negative Home Equity as of June 30, 2009, by Loan Origination Year



Source: GAO analysis of LP data and FHFA All-Transactions Index.

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As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the report date. At that time, we will send copies of this report to interested congressional parties and other interested parties. In addition, the report will be available at no charge on GAO's Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-8678 or shearw@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in enclosure VIII.

William B. Shear
Director, Financial Markets and Community Investment

Enclosures

Enclosure I

Status of Nonprime Loans Originated from 2000 through 2007 by Cohort Year and Product Type, as of June 30, 2009

This enclosure contains the results of our analysis of LoanPerformance (LP) data on the status of nonprime mortgages originated from 2000 through 2007, as of June 30, 2009. Tables 2 and 3 provide information in percentages and total numbers, respectively.

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Table 2: Percentage of Nonprime Loans in Different Status Categories by Cohort Year as of June 30, 2009

	Subprime															
	ARM								Fixed rate							
Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total		Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total
2000	80%	3%	1%	1%	0%	15%	**100%**		**2000**	72%	6%	2%	1%	0%	18%	**100%**
2001	83%	3%	1%	1%	0%	11%	**100%**		**2001**	72%	9%	2%	1%	1%	14%	**100%**
2002	83%	5%	2%	1%	1%	9%	**100%**		**2002**	73%	13%	3%	1%	1%	9%	**100%**
2003	82%	8%	1%	1%	1%	7%	**100%**		**2003**	66%	22%	3%	1%	1%	6%	**100%**
2004	73%	14%	3%	2%	2%	7%	**100%**		**2004**	53%	32%	5%	3%	2%	6%	**100%**
2005	47%	28%	5%	4%	5%	11%	**100%**		**2005**	35%	40%	8%	5%	4%	7%	**100%**
2006	23%	32%	8%	10%	10%	16%	**100%**		**2006**	22%	43%	11%	9%	6%	8%	**100%**
2007	16%	37%	11%	16%	11%	10%	**100%**		**2007**	14%	46%	14%	12%	7%	6%	**100%**
Total	**58%**	**19%**	**4%**	**4%**	**4%**	**11%**	100%		**Total**	**51%**	**29%**	**6%**	**4%**	**3%**	**8%**	100%

	Short-term hybrid ARM								Other						
Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total	Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total
2000	77%	2%	1%	0%	0%	21%	100%	**2000**	66%	6%	2%	1%	1%	25%	**100%**
2001	78%	2%	1%	1%	0%	18%	100%	**2001**	71%	7%	2%	1%	1%	19%	**100%**
2002	82%	2%	1%	1%	0%	14%	100%	**2002**	70%	12%	2%	1%	1%	13%	**100%**
2003	84%	3%	1%	1%	1%	11%	100%	**2003**	66%	18%	4%	2%	1%	9%	**100%**
2004	78%	5%	2%	2%	1%	12%	100%	**2004**	54%	33%	4%	2%	2%	5%	**100%**
2005	57%	10%	4%	5%	5%	19%	100%	**2005**	33%	33%	8%	6%	7%	13%	**100%**
2006	30%	18%	8%	11%	11%	23%	100%	**2006**	19%	34%	11%	10%	11%	16%	**100%**
2007	18%	27%	11%	15%	14%	15%	100%	**2007**	11%	38%	14%	12%	13%	11%	**100%**
Total	**62%**	**9%**	**4%**	**5%**	**4%**	**17%**	100%	**Total**	**40%**	**24%**	**7%**	**6%**	**6%**	**16%**	100%

	Alt-A															
	ARM									Fixed rate						
Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total		Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total
2000	90%	6%	1%	0%	0%	3%	**100%**		**2000**	92%	2%	0%	0%	0%	6%	**100%**
2001	94%	2%	0%	0%	0%	3%	**100%**		**2001**	90%	4%	0%	0%	0%	5%	**100%**
2002	92%	4%	0%	0%	0%	3%	**100%**		**2002**	81%	13%	1%	0%	0%	4%	**100%**
2003	85%	11%	1%	1%	0%	3%	**100%**		**2003**	60%	36%	1%	1%	1%	2%	**100%**
2004	72%	18%	2%	1%	2%	5%	**100%**		**2004**	49%	44%	2%	1%	1%	2%	**100%**
2005	46%	31%	3%	4%	5%	11%	**100%**		**2005**	33%	53%	4%	3%	4%	5%	**100%**
2006	24%	36%	5%	7%	11%	16%	**100%**		**2006**	24%	50%	6%	5%	7%	8%	**100%**
2007	13%	47%	7%	10%	12%	12%	**100%**		**2007**	14%	61%	6%	6%	7%	6%	**100%**
Total	**48%**	**28%**	**3%**	**4%**	**6%**	**10%**	100%		**Total**	**44%**	**42%**	**3%**	**2%**	**3%**	**5%**	100%

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Payment-option ARM									Other							
Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total		Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total
2000	97%	2%	0%	0%	0%	1%	100%		**2000**	85%	5%	1%	0%	0%	9%	**100%**
2001	94%	4%	0%	0%	0%	1%	100%		**2001**	84%	4%	1%	0%	0%	10%	**100%**
2002	92%	7%	0%	0%	0%	0%	100%		**2002**	84%	6%	1%	0%	0%	8%	**100%**
2003	85%	11%	1%	1%	1%	1%	100%		**2003**	75%	20%	1%	1%	1%	3%	**100%**
2004	77%	15%	2%	2%	2%	2%	100%		**2004**	67%	27%	1%	1%	1%	3%	**100%**
2005	54%	23%	3%	7%	6%	8%	100%		**2005**	37%	31%	4%	4%	8%	16%	**100%**
2006	26%	34%	6%	11%	11%	12%	100%		**2006**	19%	36%	7%	9%	14%	15%	**100%**
2007	12%	47%	8%	12%	13%	9%	100%		**2007**	9%	49%	8%	8%	15%	11%	**100%**
Total	**44%**	**28%**	**4%**	**8%**	**8%**	**8%**	**100%**		**Total**	**42%**	**29%**	**5%**	**5%**	**8%**	**10%**	**100%**

Source: GAO analysis of LP data.

Note: Percentages for ARMs and fixed-rate mortgages do not include balloon mortgages, which account for most of the "other" category. Balloon mortgages can have fixed or adjustable interest rates.

Table 3: Number of Nonprime Loans in Different Status Categories by Cohort Year as of June 30, 2009

	Subprime															
	ARM								Fixed rate							
Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total		Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total
2000	10,204	384	137	80	29	1,968	**12,802**		**2000**	112,149	10,036	2,611	1,545	709	27,717	**154,767**
2001	7,048	268	89	69	30	975	**8,479**		**2001**	130,408	16,662	4,201	2,337	1,219	25,358	**180,185**
2002	17,446	979	320	182	137	1,947	**21,011**		**2002**	167,995	29,867	5,859	2,983	1,734	20,331	**228,769**
2003	35,223	3,283	596	439	339	3,001	**42,881**		**2003**	284,032	95,924	13,674	6,410	4,527	25,538	**430,105**
2004	38,236	7,258	1,344	1,084	967	3,699	**52,588**		**2004**	242,520	146,996	23,207	12,807	8,112	27,578	**461,220**
2005	26,324	15,416	2,651	2,352	2,922	6,322	**55,987**		**2005**	150,195	171,157	34,222	23,063	15,199	30,453	**424,289**
2006	11,210	15,398	3,937	4,643	5,001	7,909	**48,098**		**2006**	78,450	153,669	39,451	32,834	21,238	29,495	**355,137**
2007	2,412	5,665	1,647	2,509	1,699	1,500	**15,432**		**2007**	13,081	42,108	12,997	10,686	6,535	5,291	**90,698**
Total	**148,103**	**48,651**	**10,721**	**11,358**	**11,124**	**27,321**	**257,278**		**Total**	**1,178,830**	**666,419**	**136,222**	**92,665**	**59,273**	**191,761**	**2,325,170**

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	Short-term hybrid ARM								Other						
Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total	Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total
2000	189,826	3,875	1,413	1,015	530	51,185	**247,844**	**2000**	25,216	2,359	609	350	266	9,685	**38,485**
2001	246,485	6,769	2,881	2,097	1,114	56,315	**315,661**	**2001**	22,559	2,131	550	317	200	6,092	**31,849**
2002	424,943	11,512	4,533	3,520	2,015	70,103	**516,626**	**2002**	12,825	2,246	431	267	173	2,356	**18,298**
2003	670,733	21,929	8,664	6,973	5,079	84,379	**797,757**	**2003**	6,874	1,921	391	171	142	953	**10,452**
2004	1,114,037	66,817	27,042	30,669	20,504	168,972	**1,428,041**	**2004**	1,896	1,134	131	83	65	176	**3,485**
2005	1,012,637	182,424	73,282	90,087	89,013	339,339	**1,786,782**	**2005**	5,250	5,281	1,255	1,026	1,039	1,986	**15,837**
2006	381,560	232,563	98,227	136,406	142,140	298,959	**1,289,855**	**2006**	16,412	30,012	9,454	8,729	9,327	14,247	**88,181**
2007	35,251	54,504	22,359	29,260	27,054	29,811	**198,239**	**2007**	2,928	10,056	3,704	3,130	3,467	2,859	**26,144**
Total	**4,075,472**	**580,393**	**238,401**	**300,027**	**287,449**	**1,099,063**	**6,580,805**	**Total**	**93,960**	**55,140**	**16,525**	**14,073**	**14,679**	**38,354**	**232,731**

	Alt-A														
	ARM								Fixed rate						
Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total	Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total
2000	5,277	329	42	15	12	177	**5,852**	**2000**	61,367	1,182	119	52	53	3,819	**66,592**
2001	22,618	587	61	45	49	817	**24,177**	**2001**	99,110	4,840	455	262	149	5,479	**110,295**
2002	44,496	2,020	129	111	91	1,287	**48,134**	**2002**	141,852	23,042	1,442	735	610	7,121	**174,802**
2003	93,110	11,780	692	655	540	2,837	**109,614**	**2003**	183,627	110,535	4,041	1,991	1,798	6,521	**308,513**
2004	332,729	84,957	7,026	5,810	7,706	21,448	**459,676**	**2004**	169,022	152,619	7,754	4,515	4,515	8,652	**347,077**
2005	268,556	179,972	19,317	20,503	31,858	61,709	**581,915**	**2005**	180,648	292,614	20,616	13,862	19,612	25,762	**553,114**
2006	116,993	171,781	25,047	35,300	53,030	77,850	**480,001**	**2006**	119,449	248,495	27,959	23,214	36,519	39,972	**495,608**
2007	23,799	88,062	12,767	17,827	22,533	22,223	**187,211**	**2007**	25,576	109,407	11,188	10,081	13,299	9,927	**179,478**
Total	**907,578**	**539,488**	**65,081**	**80,266**	**115,819**	**188,348**	**1,896,580**	**Total**	**980,651**	**942,734**	**73,574**	**54,712**	**76,555**	**107,253**	**2,235,479**

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	Payment-option ARM								Other						
Cohort year	**Prepaid**	**Current**	**Delinquent**	**In default**	**In foreclosure process**	**Completed foreclosure process**	**Total**		Cohort year	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Total
2000	4,086	90	5	6	2	28	**4,217**		**2000**	1,228	74	12	4	2	133	**1,453**
2001	643	28	1	1	2	7	**682**		**2001**	2,903	141	28	8	7	349	**3,436**
2002	4,216	308	11	4	9	22	**4,570**		**2002**	3,242	225	36	19	17	301	**3,840**
2003	6,430	823	96	42	87	93	**7,571**		**2003**	7,391	1,938	111	72	79	295	**9,886**
2004	94,931	18,188	2,067	2,662	2,356	2,997	**123,201**		**2004**	4,132	1,650	74	64	63	158	**6,141**
2005	167,253	71,096	10,100	20,243	17,707	23,727	**310,126**		**2005**	488	405	56	59	99	210	**1,317**
2006	83,870	111,633	19,723	35,713	36,487	38,833	**326,259**		**2006**	5,058	9,296	1,795	2,464	3,693	3,828	**26,134**
2007	7,472	28,351	4,799	6,977	7,598	5,322	**60,519**		**2007**	640	3,415	579	561	1,060	737	**6,992**
Total	**368,901**	**230,517**	**36,802**	**65,648**	**64,248**	**71,029**	**837,145**		**Total**	**25,082**	**17,144**	**2,691**	**3,251**	**5,020**	**6,011**	**59,199**

Source: GAO analysis of LP data.

Note: Numbers for ARMs and fixed-rate mortgages do not include balloon mortgages, which account for most of the “other” category. Balloon mortgages can have fixed or adjustable interest rates.

Enclosure II

Status of Nonprime Loans Originated from 2004 through 2007 by Year and Quarter, as of June 30, 2009

This enclosure contains the results of our analysis of LoanPerformance (LP) data on the annual and quarterly status of nonprime mortgages originated from 2004 through 2007, as of June 30, 2009. Tables 4 and 5 provide information in percentages and total numbers, respectively.

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Table 4: Percentage of Nonprime Loans Originated in 2004 through 2007 in Different Status Categories as of June 30, 2009

	2007 Cohort													
	Subprime							Alt-A						
Status date	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total
December 31, 2007	5%	71%	15%	4%	4%	1%	**100%**	5%	87%	5%	1%	2%	0%	**100%**
December 31, 2008	13%	41%	16%	11%	10%	8%	**100%**	11%	63%	8%	6%	7%	5%	**100%**
June 30, 2009	16%	34%	12%	14%	12%	12%	**100%**	13%	53%	7%	8%	10%	9%	**100%**

	2006 Cohort													
	Subprime							**Alt-A**						
Status date	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total
December 31, 2006	7%	78%	11%	2%	2%	0%	**100%**	6%	90%	3%	0%	0%	0%	**100%**
December 31, 2007	18%	50%	13%	6%	7%	6%	**100%**	17%	70%	6%	2%	3%	2%	**100%**
December 31, 2008	25%	28%	11%	9%	10%	16%	**100%**	22%	48%	7%	6%	8%	8%	**100%**
June 30, 2009	27%	24%	9%	10%	10%	20%	**100%**	24%	41%	6%	7%	10%	12%	**100%**

	2005 Cohort													
	Subprime							**Alt-A**						
Status date	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total
December 31, 2005	7%	83%	8%	1%	1%	0%	**100%**	6%	92%	2%	0%	0%	0%	**100%**
December 31, 2006	28%	54%	9%	3%	3%	3%	**100%**	23%	72%	3%	0%	1%	0%	**100%**
December 31, 2007	46%	28%	8%	4%	5%	8%	**100%**	36%	55%	4%	1%	2%	2%	**100%**
December 31, 2008	51%	19%	6%	5%	5%	15%	**100%**	40%	43%	4%	3%	4%	6%	**100%**
June 30, 2009	52%	17%	5%	5%	5%	17%	**100%**	42%	38%	3%	4%	5%	8%	**100%**

	2004 Cohort													
	Subprime							**Alt-A**						
Status date	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total
December 31, 2004	6%	86%	6%	1%	1%	0%	**100%**	5%	93%	2%	0%	0%	0%	100%
December 31, 2005	34%	52%	7%	2%	2%	2%	**100%**	28%	69%	2%	0%	0%	0%	100%
December 31, 2006	60%	26%	5%	2%	2%	5%	**100%**	47%	50%	2%	0%	0%	1%	100%
December 31, 2007	69%	16%	4%	2%	2%	8%	**100%**	58%	37%	2%	1%	1%	2%	100%
December 31, 2008	71%	12%	3%	2%	1%	10%	**100%**	62%	30%	2%	1%	1%	3%	100%
June 30, 2009	72%	12%	3%	2%	2%	10%	**100%**	64%	28%	2%	1%	2%	4%	100%

Source: GAO analysis of LP data.

Enclosure II

Table 5: Number of Nonprime Loans Originated in 2004 through 2007 in Different Status Categories as of June 30, 2009

	2007 Cohort													
	Subprime							Alt-A						
Status date	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total
December 31, 2007	16,702	231,732	48,916	14,677	13,944	2,575	**328,546**	20,524	375,033	21,007	6,470	7,883	1,179	**432,096**
December 31, 2008	44,058	135,117	51,296	37,274	32,844	27,904	**328,493**	46,120	272,870	35,102	24,909	31,796	22,279	**433,076**
June 30, 2009	51,459	112,333	40,707	45,585	38,755	39,654	**328,493**	56,164	229,235	29,333	35,446	44,490	38,408	**433,076**

	2006 Cohort													
	Subprime							Alt-A						
Status date	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total
December 31, 2006	91,519	1,048,577	152,186	27,941	24,897	5,257	**1,350,377**	58,154	944,997	35,953	3,871	4,530	1,045	**1,048,550**
December 31, 2007	308,751	882,179	234,132	109,507	132,283	97,330	**1,764,182**	222,312	919,887	78,744	30,693	42,114	26,350	**1,320,100**
December 31, 2008	445,971	499,686	198,891	165,708	167,881	285,050	**1,763,187**	292,837	639,616	97,616	80,028	99,716	110,668	**1,320,481**
June 30, 2009	468,037	431,642	151,069	182,612	177,706	352,118	**1,763,184**	317,435	541,205	74,524	96,691	129,729	161,215	**1,320,799**

	2005 Cohort													
	Subprime							Alt-A						
Status date	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total
December 31, 2005	122,100	1,438,784	140,860	22,174	14,074	2,925	**1,740,917**	69,322	1,073,961	25,836	2,592	862	177	**1,172,750**
December 31, 2006	627,777	1,210,898	210,942	63,499	70,422	59,164	**2,242,702**	332,527	1,035,468	40,766	7,148	10,283	7,125	**1,433,317**
December 31, 2007	1,051,031	642,437	180,324	99,140	112,349	176,696	**2,261,977**	513,236	795,044	51,339	20,826	27,123	32,340	**1,439,908**
December 31, 2008	1,149,945	417,846	138,511	108,054	104,623	332,522	**2,251,501**	580,024	611,185	59,857	44,656	52,863	84,010	**1,432,595**
June 30, 2009	1,171,815	374,278	111,410	116,528	108,173	379,118	**2,261,322**	610,719	544,087	50,089	54,667	69,276	111,674	**1,440,512**

	2004 Cohort													
	Subprime							Alt-A						
Status date	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total	Prepaid (cumulative)	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process (cumulative)	Total
December 31, 2004	93,670	1,294,270	97,242	11,653	8,467	1,282	**1,506,584**	37,168	667,091	12,295	968	548	133	**718,203**
December 31, 2005	661,253	1,002,040	142,526	46,016	36,363	32,192	**1,920,390**	260,603	631,707	19,096	4,375	2,663	2,756	**921,200**
December 31, 2006	1,144,949	502,979	100,780	41,053	40,637	91,913	**1,922,311**	432,908	459,054	16,964	3,830	4,430	8,832	**926,018**
December 31, 2007	1,329,079	305,661	69,054	40,021	36,249	149,349	**1,929,413**	540,156	344,039	16,852	5,921	6,110	16,885	**929,963**
December 31, 2008	1,368,911	239,764	59,388	41,398	27,984	189,626	**1,927,071**	576,516	281,900	18,657	10,129	10,637	28,001	**925,840**
June 30, 2009	1,377,506	222,205	51,724	44,643	29,648	200,565	**1,926,291**	594,846	257,414	16,921	13,051	14,640	33,266	**930,138**

Source: GAO analysis of LP data.

Enclosure III

Status of Nonprime Loans Originated from 2000 through 2007 by Census Division and State as of June 30, 2009

This enclosure contains the results of our analysis of LoanPerformance (LP) data on the status of nonprime mortgages by Census division and state. The analysis covers mortgages originated from 2000 through 2007, as of June 30, 2009. Tables 6 and 7 provide information in percentages and total numbers, respectively.

Enclosure III

Table 6: Percentage of 2000 through 2007 Nonprime Loans in Different Status Categories by State and Census Division, as of June 30, 2009

State	Market segment	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Unknown	Total
Connecticut	Subprime	62.93%	14.67%	4.56%	3.91%	4.16%	9.69%	0.09%	123,038
	Alt-A	48.26%	36.79%	4.05%	2.86%	4.21%	3.78%	0.06%	44,726
Maine	Subprime	64.01%	14.71%	4.39%	3.00%	4.84%	8.96%	0.09%	36,309
	Alt-A	48.98%	36.40%	3.54%	2.07%	5.05%	3.90%	0.05%	9,697
Massachusetts	Subprime	67.19%	10.66%	3.49%	4.92%	3.13%	10.45%	0.16%	202,214
	Alt-A	52.89%	31.27%	3.52%	3.42%	3.82%	4.96%	0.12%	85,212
New Hampshire	Subprime	62.24%	14.69%	5.11%	4.33%	2.06%	11.51%	0.07%	41,429
	Alt-A	48.73%	36.28%	3.93%	2.81%	1.87%	6.29%	0.10%	15586
Rhode Island	Subprime	70.42%	9.43%	3.10%	2.85%	2.40%	11.61%	0.18%	52814
	Alt-A	51.74%	30.08%	3.92%	2.92%	3.56%	7.67%	0.10%	15,746
Vermont	Subprime	65.86%	15.93%	4.15%	2.99%	4.31%	6.64%	0.11%	9,754
	Alt-A	51.93%	37.26%	3.35%	1.79%	3.37%	2.25%	0.05%	3,913
New England	**Subprime**	**65.71%**	**12.37%**	**3.96%**	**4.18%**	**3.38%**	**10.28%**	**0.13%**	**465,558**
	Alt-A	**50.99%**	**33.44%**	**3.72%**	**3.06%**	**3.78%**	**4.90%**	**0.09%**	**174,880**
New Jersey	Subprime	69.61%	10.20%	3.44%	3.92%	5.55%	7.15%	0.13%	264,675
	Alt-A	52.84%	30.14%	3.57%	3.22%	6.78%	3.35%	0.10%	143,696
New York	Subprime	59.26%	16.95%	4.71%	5.06%	5.94%	7.99%	0.09%	384,847
	Alt-A	43.17%	39.45%	4.16%	4.67%	5.52%	2.99%	0.04%	165,959
Pennsylvania	Subprime	53.01%	21.94%	6.21%	5.25%	3.63%	9.90%	0.07%	262,666
	Alt-A	44.81%	42.87%	3.73%	2.54%	2.74%	3.25%	0.07%	81,596
Mid Atlantic	**Subprime**	**60.46%**	**16.43%**	**4.77%**	**4.78%**	**5.16%**	**8.30%**	**0.10%**	**912,188**
	Alt-A	**47.06%**	**36.74%**	**3.86%**	**3.69%**	**5.40%**	**3.18%**	**0.07%**	**391,251**
Illinois	Subprime	63.36%	11.30%	3.84%	4.15%	3.95%	13.26%	0.14%	450,107
	Alt-A	52.31%	29.94%	3.34%	3.41%	4.91%	6.02%	0.06%	147,516
Indiana	Subprime	43.63%	18.32%	5.35%	4.59%	4.12%	23.87%	0.12%	176,207
	Alt-A	39.56%	39.43%	3.60%	2.78%	4.09%	10.52%	0.02%	38,356
Michigan	Subprime	48.97%	12.56%	4.73%	4.82%	1.82%	26.97%	0.13%	373,287
	Alt-A	37.59%	37.48%	4.33%	3.41%	2.59%	14.57%	0.03%	94,666
Ohio	Subprime	45.49%	17.64%	5.02%	4.58%	4.31%	22.84%	0.12%	319,380
	Alt-A	36.65%	43.20%	3.76%	2.87%	4.29%	9.19%	0.04%	73,562
Wisconsin	Subprime	63.70%	11.45%	3.81%	3.34%	3.92%	13.67%	0.10%	131,059
	Alt-A	48.35%	36.45%	3.41%	2.28%	3.88%	5.59%	0.04%	29,600
East North Central	**Subprime**	**53.35%**	**13.89%**	**4.51%**	**4.40%**	**3.50%**	**20.22%**	**0.13%**	**1,450,040**
	Alt-A	**44.10%**	**35.79%**	**3.70%**	**3.16%**	**4.06%**	**9.15%**	**0.05%**	**383,700**
Iowa	Subprime	57.25%	15.49%	4.32%	2.86%	3.31%	16.68%	0.08%	52,626
	Alt-A	44.39%	43.21%	3.13%	1.45%	2.46%	5.34%	0.02%	10,534
Kansas	Subprime	56.27%	16.81%	4.66%	3.38%	2.11%	16.68%	0.09%	49,747
	Alt-A	44.44%	44.50%	2.72%	1.51%	1.60%	5.22%	0.01%	16,847
Minnesota	Subprime	60.75%	10.67%	3.28%	3.20%	2.57%	19.41%	0.13%	162,899
	Alt-A	38.59%	37.84%	3.79%	3.14%	3.77%	12.83%	0.05%	67,315
Missouri	Subprime	55.18%	14.14%	4.89%	4.10%	1.47%	20.11%	0.11%	180,297
	Alt-A	45.60%	38.83%	3.21%	2.23%	1.45%	8.64%	0.05%	48,821
Nebraska	Subprime	51.68%	19.84%	5.09%	3.90%	2.33%	17.10%	0.07%	29,599
	Alt-A	41.88%	45.53%	3.08%	2.12%	1.66%	5.74%	0.00%	6,987
North Dakota	Subprime	60.04%	19.78%	4.79%	3.07%	2.40%	9.90%	0.02%	4,464
	Alt-A	44.63%	46.37%	2.55%	1.19%	1.79%	3.42%	0.05%	1,844
South Dakota	Subprime	57.63%	17.35%	4.71%	2.81%	3.06%	14.42%	0.01%	7,321
	Alt-A	45.04%	42.85%	2.65%	2.03%	2.32%	5.09%	0.04%	2,418
West North Central	**Subprime**	**57.25%**	**13.84%**	**4.27%**	**3.55%**	**2.19%**	**18.79%**	**0.10%**	**486,953**
	Alt-A	**42.15%**	**39.77%**	**3.38%**	**2.47%**	**2.57%**	**9.61%**	**0.04%**	**154,766**
Delaware	Subprime	60.20%	16.92%	5.41%	4.72%	5.06%	7.62%	0.06%	24,643
	Alt-A	47.55%	38.96%	3.67%	2.64%	3.81%	3.31%	0.06%	11,752
District of Columbia	Subprime	71.05%	10.51%	3.30%	3.89%	2.53%	8.56%	0.17%	17,369
	Alt-A	51.62%	35.67%	3.28%	2.75%	2.40%	4.23%	0.05%	15,458
Florida	Subprime	56.24%	13.03%	4.07%	4.83%	10.45%	11.31%	0.08%	935,137
	Alt-A	37.31%	32.21%	3.93%	5.04%	14.99%	6.45%	0.07%	528,148
Georgia	Subprime	48.93%	15.31%	5.85%	6.31%	2.73%	20.77%	0.10%	267,324
	Alt-A	38.79%	40.27%	4.57%	3.36%	2.73%	10.22%	0.06%	157,912
Maryland	Subprime	70.19%	11.05%	3.86%	4.43%	3.06%	7.30%	0.11%	255,100

Enclosure III

State	Market segment	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Unknown	Total
	Alt-A	49.36%	33.73%	3.94%	4.11%	4.40%	4.37%	0.10%	135,828
North Carolina	Subprime	53.79%	17.56%	6.22%	5.12%	2.04%	15.17%	0.10%	179,429
	Alt-A	45.86%	40.80%	3.66%	2.53%	1.81%	5.29%	0.04%	86,516
South Carolina	Subprime	51.05%	18.18%	5.95%	4.19%	3.69%	16.84%	0.11%	94,131
	Alt-A	46.33%	38.42%	3.47%	2.29%	3.73%	5.70%	0.06%	48,869
Virginia	Subprime	65.27%	13.10%	4.21%	4.19%	1.99%	11.15%	0.09%	213,173
	Alt-A	44.66%	35.19%	3.44%	3.50%	2.93%	10.18%	0.09%	162,456
West Virginia	Subprime	53.22%	19.87%	6.48%	4.90%	2.39%	12.97%	0.18%	16,904
	Alt-A	40.10%	40.22%	5.11%	2.89%	3.14%	8.41%	0.12%	4,813
South Atlantic	**Subprime**	**57.69%**	**13.82%**	**4.61%**	**4.89%**	**6.30%**	**12.59%**	**0.09%**	**2,003,210**
	Alt-A	**41.30%**	**34.97%**	**3.90%**	**4.12%**	**8.56%**	**7.08%**	**0.07%**	**1,151,752**
Alabama	Subprime	50.02%	19.34%	6.65%	6.39%	1.88%	15.68%	0.04%	84,277
	Alt-A	43.98%	41.21%	3.84%	2.53%	1.66%	6.75%	0.03%	27,191
Kentucky	Subprime	49.53%	18.94%	5.39%	3.96%	3.64%	18.44%	0.10%	71,582
	Alt-A	41.80%	43.09%	3.43%	2.14%	2.96%	6.57%	0.02%	18,423
Mississippi	Subprime	43.35%	20.94%	7.62%	7.62%	2.34%	18.05%	0.08%	52,116
	Alt-A	41.74%	41.89%	4.42%	2.79%	1.94%	7.18%	0.03%	9,374
Tennessee	Subprime	46.71%	19.50%	6.36%	6.93%	1.77%	18.65%	0.07%	168,260
	Alt-A	42.00%	43.41%	3.70%	2.54%	1.39%	6.94%	0.02%	46,029
East South Central	**Subprime**	**47.52%**	**19.56%**	**6.41%**	**6.34%**	**2.23%**	**17.86%**	**0.07%**	**376,235**
	Alt-A	**42.47%**	**42.62%**	**3.75%**	**2.49%**	**1.80%**	**6.84%**	**0.02%**	**101,017**
Arkansas	Subprime	47.12%	23.65%	6.53%	5.31%	2.05%	15.31%	0.03%	37,683
	Alt-A	38.59%	47.16%	3.30%	2.39%	1.68%	6.89%	0.00%	11,341
Louisiana	Subprime	52.49%	21.54%	6.42%	5.08%	3.25%	11.12%	0.10%	89,804
	Alt-A	47.34%	40.58%	3.55%	2.09%	2.50%	3.91%	0.03%	19,371
Oklahoma	Subprime	45.32%	23.79%	5.69%	3.76%	3.54%	17.85%	0.05%	66,156
	Alt-A	37.99%	49.96%	2.95%	1.46%	2.39%	5.23%	0.01%	18,229
Texas	Subprime	41.67%	28.45%	7.27%	5.05%	2.18%	15.35%	0.04%	569,956
	Alt-A	37.42%	48.73%	3.30%	2.01%	1.35%	7.18%	0.02%	185,902
West South Central	**Subprime**	**43.53%**	**26.99%**	**6.99%**	**4.95%**	**2.41%**	**15.07%**	**0.05%**	**763,599**
	Alt-A	**38.34%**	**48.08%**	**3.29%**	**1.99%**	**1.54%**	**6.74%**	**0.02%**	**234,843**
Arizona	Subprime	61.22%	11.28%	3.48%	4.78%	3.76%	15.39%	0.08%	300,651
	Alt-A	46.70%	30.78%	3.39%	3.73%	3.12%	10.84%	0.06%	233,384
Colorado	Subprime	55.20%	14.03%	3.44%	3.12%	2.34%	21.78%	0.09%	188,746
	Alt-A	46.48%	38.85%	2.63%	1.90%	2.26%	7.84%	0.04%	138,461
Idaho	Subprime	61.54%	14.77%	4.20%	4.02%	3.40%	12.01%	0.04%	38,244
	Alt-A	47.94%	37.41%	3.09%	2.61%	3.90%	5.03%	0.03%	31,987
Montana	Subprime	64.48%	15.06%	3.91%	3.71%	2.69%	10.13%	0.02%	12,971
	Alt-A	53.74%	37.09%	2.58%	1.86%	2.02%	2.70%	0.00%	8,848
Nevada	Subprime	57.90%	10.47%	3.19%	5.41%	4.60%	18.36%	0.07%	152,571
	Alt-A	37.47%	30.49%	4.17%	6.30%	7.16%	14.36%	0.05%	152,067
New Mexico	Subprime	64.51%	15.09%	4.12%	2.81%	2.74%	10.60%	0.12%	40,487
	Alt-A	50.82%	38.34%	2.69%	1.66%	3.30%	3.13%	0.06%	22,322
Utah	Subprime	66.35%	11.77%	3.46%	3.15%	2.40%	12.80%	0.07%	80,321
	Alt-A	55.47%	31.60%	2.59%	2.08%	2.88%	5.34%	0.04%	56,951
Wyoming	Subprime	65.73%	17.40%	4.25%	2.96%	1.44%	8.21%	0.02%	9,745
	Alt-A	55.57%	38.10%	2.13%	1.24%	0.75%	2.21%	0.00%	4,517
Mountain	**Subprime**	**60.01%**	**12.29%**	**3.49%**	**4.19%**	**3.35%**	**16.59%**	**0.08%**	**823,736**
	Alt-A	**45.62%**	**33.23%**	**3.28%**	**3.63%**	**4.37%**	**9.82%**	**0.05%**	**648,537**
Alaska	Subprime	63.45%	16.79%	4.54%	3.73%	2.24%	9.23%	0.02%	9,433
	Alt-A	47.68%	41.99%	2.90%	1.73%	1.70%	4.01%	0.00%	3,937
California	Subprime	67.39%	9.34%	2.40%	3.78%	3.21%	13.76%	0.12%	1,745,440
	Alt-A	48.43%	29.68%	3.37%	5.46%	4.85%	8.18%	0.03%	1,530,336
Hawaii	Subprime	65.82%	17.60%	3.35%	3.66%	4.59%	4.91%	0.07%	42,053
	Alt-A	48.67%	38.89%	3.12%	2.90%	4.42%	1.97%	0.04%	28,459
Oregon	Subprime	63.72%	15.09%	3.67%	3.77%	3.17%	10.51%	0.06%	106,917
	Alt-A	49.73%	38.12%	2.79%	2.50%	2.80%	4.03%	0.03%	78,473
Washington	Subprime	65.58%	13.79%	3.62%	3.85%	2.96%	10.15%	0.05%	204,684
	Alt-A	50.95%	37.49%	2.99%	2.47%	2.86%	3.22%	0.03%	144,133
Pacific	**Subprime**	**66.98%**	**10.26%**	**2.61%**	**3.78%**	**3.21%**	**13.05%**	**0.11%**	**2,108,527**
	Alt-A	**48.69%**	**30.85%**	**3.31%**	**5.04%**	**4.59%**	**7.49%**	**0.03%**	**1,785,338**
United States	**Subprime**	58.39%	14.38%	4.28%	4.45%	3.97%	14.43%	0.10%	**9,390,046**

Enclosure III

State	Market segment	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Unknown	Total
	Alt-A	45.39%	34.34%	3.54%	4.05%	5.20%	7.41%	0.05%	**5,026,084**
	Total Nonprime	53.86%	21.34%	4.02%	4.31%	4.40%	11.98%	0.08%	**14,416,130**

Source: GAO analysis of LP data.

Note: Some data were insufficient to classify loans into a status category but these "unknown" loans are included in the total number of loans. This table does not include data for Guam, Puerto Rico, and the Virgin Islands.

Table 7: Number of 2000 through 2007 Nonprime Loans in Different Status Categories by Census Division and State, as of June 30, 2009

State	Market segment	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Unknown	Total
Connecticut	Subprime	77,422	18,054	5,608	4,806	5,124	11,918	106	123,038
	Alt-A	21,585	16,455	1,811	1,278	1,881	1,690	26	44,726
Maine	Subprime	23,243	5,341	1,593	1,089	1,758	3,253	32	36,309
	Alt-A	4,750	3,530	343	201	490	378	5	9,697
Massachusetts	Subprime	135,866	21,560	7,065	9,953	6,325	21,128	317	202,214
	Alt-A	45,071	26,645	2,996	2,912	3,259	4,229	100	85,212
New Hampshire	Subprime	25,785	6,085	2,115	1,793	855	4,769	27	41,429
	Alt-A	7,595	5,654	613	438	291	980	15	15,586
Rhode Island	Subprime	37,192	4,979	1,639	1,507	1,269	6,134	94	52,814
	Alt-A	8,147	4,737	618	460	561	1,207	16	15,746
Vermont	Subprime	6,424	1,554	405	292	420	648	11	9,754
	Alt-A	2,032	1,458	131	70	132	88	2	3,913
New England	**Subprime**	**305,932**	**57,573**	**18,425**	**19,440**	**15,751**	**47,850**	**587**	**465,558**
	Alt-A	**89,180**	**58,479**	**6,512**	**5,359**	**6,614**	**8,572**	**164**	**174,880**
New Jersey	Subprime	184,231	27,004	9,100	10,376	14,702	18,912	350	264,675
	Alt-A	75,925	43,311	5,134	4,634	9,737	4,818	137	143,696
New York	Subprime	228,070	65,232	18,120	19,475	22,856	30,752	342	384,847
	Alt-A	71,643	65,464	6,910	7,745	9,163	4,963	71	165,959
Pennsylvania	Subprime	139,227	57,617	16,311	13,780	9,522	26,015	194	262,666
	Alt-A	36,561	34,977	3,047	2,070	2,239	2,648	54	81,596
Mid Atlantic	**Subprime**	**551,528**	**149,853**	**43,531**	**43,631**	**47,080**	**75,679**	**886**	**912,188**
	Alt-A	**184,129**	**143,752**	**15,091**	**14,449**	**21,139**	**12,429**	**262**	**391,251**
Illinois	Subprime	285,197	50,873	17,279	18,687	17,767	59,676	628	450,107
	Alt-A	77,168	44,165	4,929	5,035	7,245	8,885	89	147,516
Indiana	Subprime	76,880	32,273	9,431	8,089	7,260	42,066	208	176,207
	Alt-A	15,175	15,122	1,380	1,065	1,570	4,035	9	38,356
Michigan	Subprime	182,786	46,901	17,668	17,989	6,799	100,669	475	373,287
	Alt-A	35,589	35,478	4,096	3,229	2,448	13,793	33	94,666
Ohio	Subprime	145,272	56,344	16,025	14,626	13,781	72,944	388	319,380
	Alt-A	26,962	31,776	2,769	2,114	3,154	6,757	30	73,562
Wisconsin	Subprime	83,480	15,012	4,992	4,383	5,143	17,913	136	131,059
	Alt-A	14,311	10,790	1,010	674	1,149	1,654	12	29,600
East North Central	**Subprime**	**773,615**	**201,403**	**65,395**	**63,774**	**50,750**	**293,268**	**1,835**	**1,450,040**
	Alt-A	**169,205**	**137,331**	**14,184**	**12,117**	**15,566**	**35,124**	**173**	**383,700**
Iowa	Subprime	30,130	8,151	2,275	1,505	1,742	8,780	43	52,626
	Alt-A	4,676	4,552	330	153	259	562	2	10,534
Kansas	Subprime	27,994	8,361	2,320	1,680	1,051	8,298	43	49,747
	Alt-A	7,487	7,497	459	254	269	879	2	16,847
Minnesota	Subprime	98,957	17,374	5,337	5,218	4,185	31,622	206	162,899
	Alt-A	25,976	25,470	2,548	2,115	2,540	8,634	32	67,315
Missouri	Subprime	99,485	25,495	8,814	7,399	2,654	36,259	191	180,297
	Alt-A	22,260	18,959	1,568	1,089	706	4,217	22	48,821
Nebraska	Subprime	15,298	5,873	1,506	1,153	689	5,060	20	29,599
	Alt-A	2,926	3,181	215	148	116	401	0	6,987
North Dakota	Subprime	2,680	883	214	137	107	442	1	4,464
	Alt-A	823	855	47	22	33	63	1	1,844
South Dakota	Subprime	4,219	1,270	345	206	224	1,056	1	7,321
	Alt-A	1,089	1,036	64	49	56	123	1	2,418

Enclosure III

State	Market segment	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Unknown	Total
West North Central	**Subprime**	**278,763**	**67,407**	**20,811**	**17,298**	**10,652**	**91,517**	**505**	**486,953**
	Alt-A	**65,237**	**61,550**	**5,231**	**3,830**	**3,979**	**14,879**	**60**	**154,766**
Delaware	Subprime	14,836	4,170	1,333	1,163	1,246	1,879	16	24,643
	Alt-A	5,588	4,579	431	310	448	389	7	11,752
District of Columbia	Subprime	12,340	1,826	573	676	439	1,486	29	17,369
	Alt-A	7,979	5,514	507	425	371	654	8	15,458
Florida	Subprime	525,935	121,841	38,065	45,142	97,683	105,722	749	935,137
	Alt-A	197,050	170,109	20,746	26,634	79,149	34,088	372	528,148
Georgia	Subprime	130,795	40,930	15,643	16,876	7,285	55,516	279	267,324
	Alt-A	61,260	63,589	7,219	5,308	4,312	16,134	90	157,912
Maryland	Subprime	179,054	28,200	9,846	11,301	7,802	18,613	284	255,100
	Alt-A	67,038	45,811	5,357	5,583	5,979	5,930	130	135,828
North Carolina	Subprime	96,509	31,510	11,162	9,181	3,658	27,228	181	179,429
	Alt-A	39,678	35,302	3,169	2,191	1,565	4,575	36	86,516
South Carolina	Subprime	48,052	17,109	5,598	3,941	3,478	15,854	99	94,131
	Alt-A	22,642	18,777	1,694	1,119	1,821	2,786	30	48,869
Virginia	Subprime	139,146	27,922	8,973	8,931	4,252	23,764	185	213,173
	Alt-A	72,554	57,166	5,594	5,690	4,765	16,542	145	162,456
West Virginia	Subprime	8,997	3,358	1,095	828	404	2,192	30	16,904
	Alt-A	1,930	1,936	246	139	151	405	6	4,813
South Atlantic	**Subprime**	**1,155,664**	**276,866**	**92,288**	**98,039**	**126,247**	**252,254**	**1,852**	**2,003,210**
	Alt-A	**475,719**	**402,783**	**44,963**	**47,399**	**98,561**	**81,503**	**824**	**1,151,752**
Alabama	Subprime	42,155	16,296	5,601	5,388	1,587	13,216	34	84,277
	Alt-A	11,959	11,206	1,043	689	451	1,836	7	27,191
Kentucky	Subprime	35,454	13,555	3,858	2,836	2,604	13,200	75	71,582
	Alt-A	7,701	7,938	632	394	545	1,210	3	18,423
Mississippi	Subprime	22,594	10,914	3,970	3,972	1,217	9,409	40	52,116
	Alt-A	3,913	3,927	414	262	182	673	3	9,374
Tennessee	Subprime	78,602	32,810	10,704	11,659	2,985	31,378	122	168,260
	Alt-A	19,332	19,983	1,704	1,168	641	3,193	8	46,029
East South Central	**Subprime**	**178,805**	**73,575**	**24,133**	**23,855**	**8,393**	**67,203**	**271**	**376,235**
	Alt-A	**42,905**	**43,054**	**3,793**	**2,513**	**1,819**	**6,912**	**21**	**101,017**
Arkansas	Subprime	17,755	8,911	2,461	2,002	774	5,768	12	37,683
	Alt-A	4,377	5,348	374	271	190	781	0	11,341
Louisiana	Subprime	47,141	19,344	5,761	4,563	2,916	9,988	91	89,804
	Alt-A	9,171	7,861	687	404	485	758	5	19,371
Oklahoma	Subprime	29,984	15,739	3,767	2,487	2,343	11,806	30	66,156
	Alt-A	6,925	9,108	538	267	435	954	2	18,229
Texas	Subprime	237,490	162,136	41,418	28,779	12,401	87,504	228	569,956
	Alt-A	69,560	90,589	6,134	3,728	2,517	13,341	33	185,902
West South Central	**Subprime**	**332,370**	**206,130**	**53,407**	**37,831**	**18,434**	**115,066**	**361**	**763,599**
	Alt-A	**90,033**	**112,906**	**7,733**	**4,670**	**3,627**	**15,834**	**40**	**234,843**
Arizona	Subprime	184,070	33,918	10,453	14,385	11,318	46,259	248	300,651
	Alt-A	108,995	71,847	7,914	8,710	10,489	25,289	140	233,384
Colorado	Subprime	104,186	26,477	6,495	5,886	4,415	41,115	172	188,746
	Alt-A	64,355	53,790	3,645	2,629	3,129	10,862	51	138,461
Idaho	Subprime	23,536	5,648	1,608	1,539	1,302	4,595	16	38,244
	Alt-A	15,335	11,966	988	834	1,246	1,609	9	31,987
Montana	Subprime	8,364	1,954	507	481	349	1,314	2	12,971
	Alt-A	4,755	3,282	228	165	179	239	0	8,848
Nevada	Subprime	88,344	15,973	4,861	8,253	7,014	28,016	110	152,571
	Alt-A	56,985	46,361	6,344	9,573	10,881	21,843	80	152,067
New Mexico	Subprime	26,117	6,111	1,670	1,137	1,111	4,292	49	40,487
	Alt-A	11,345	8,558	600	371	737	698	13	22,322
Utah	Subprime	53,294	9,456	2,778	2,528	1,928	10,280	57	80,321
	Alt-A	31,593	17,997	1,477	1,184	1,638	3,040	22	56,951
Wyoming	Subprime	6,405	1,696	414	288	140	800	2	9,745
	Alt-A	2,510	1,721	96	56	34	100	0	4,517
Mountain	**Subprime**	**494,316**	**101,233**	**28,786**	**34,497**	**27,577**	**136,671**	**656**	**823,736**
	Alt-A	**295,873**	**215,522**	**21,292**	**23,522**	**28,333**	**63,680**	**315**	**648,537**
Alaska	Subprime	5,985	1,584	428	352	211	871	2	9,433

Enclosure III

State	Market segment	Prepaid	Current	Delinquent	In default	In foreclosure process	Completed foreclosure process	Unknown	Total
	Alt-A	1,877	1,653	114	68	67	158	0	3,937
California	Subprime	1,176,213	163,064	41,897	65,942	56,041	240,228	2,055	1,745,440
	Alt-A	741,079	454,170	51,601	83,496	74,288	125,175	527	1,530,336
Hawaii	Subprime	27,679	7,403	1,407	1,541	1,929	2,063	31	42,053
	Alt-A	13,850	11,067	889	825	1,257	560	11	28,459
Oregon	Subprime	68,127	16,133	3,924	4,036	3,393	11,235	69	106,917
	Alt-A	39,021	29,910	2,192	1,963	2,194	3,166	27	78,473
Washington	Subprime	134,225	28,227	7,411	7,874	6,058	20,784	105	204,684
	Alt-A	73,434	54,031	4,304	3,567	4,116	4,639	42	144,133
Pacific	**Subprime**	**1,412,229**	**216,411**	**55,067**	**79,745**	**67,632**	**275,181**	**2,262**	**2,108,527**
	Alt-A	**869,261**	**550,831**	**59,100**	**89,919**	**81,922**	**133,698**	**607**	**1,785,338**
United States	**Subprime**	5,483,222	1,350,451	401,843	418,110	372,516	1,354,689	9,215	**9,390,046**
	Alt-A	2,281,542	1,726,208	177,899	203,778	261,560	372,631	2,466	**5,026,084**
	Total Nonprime	7,764,764	3,076,659	579,742	621,888	634,076	1,727,320	11,681	**14,416,130**

Source: GAO analysis of LP data.

Note: Some data were insufficient to classify loans into a status category but these "unknown" loans are included in the total number of loans. This table does not include data for Guam, Puerto Rico, and the Virgin Islands.

Enclosure IV

Status of Nonprime Loans Originated from 2000 through 2007 by Congressional District as of June 30, 2009

This enclosure contains the results of our analysis of LoanPerformance (LP) data on the status of nonprime mortgages by congressional district. The analysis covers mortgages originated from 2000 through 2007, as of June 30, 2009. All figures reported are estimated.

Enclosure IV

Table 8: Estimated Percentage of 2000 through 2007 Active Nonprime Loans in Default and in the Foreclosure Process by Congressional District as of June 30, 2009

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
Alabama	01	7,831	16.62	5.73	22.35
	02	4,168	13.60	4.63	18.23
	03	5,231	14.47	4.29	18.77
	04	3,667	11.87	4.03	15.90
	05	5,177	10.87	4.15	15.03
	06	8,902	13.75	4.91	18.66
	07	7,228	16.86	5.12	21.97
Alaska	00	4,478	9.38	6.16	15.54
Arizona	01	11,932	11.30	10.01	21.30
	02	30,366	14.33	13.76	28.09
	03	22,150	12.90	12.56	25.46
	04	20,464	19.66	17.15	36.80
	05	18,041	9.88	10.59	20.47
	06	28,325	13.40	13.69	27.09
	07	24,793	14.76	14.05	28.81
	08	12,915	9.96	6.70	16.66
Arkansas	01	3,801	10.69	4.65	15.34
	02	6,882	11.72	4.49	16.22
	03	5,781	10.25	5.66	15.90
	04	3,620	12.00	3.55	15.55
California	01	15,556	10.65	8.80	19.45
	02	16,851	12.71	11.48	24.19
	03	25,868	16.48	13.52	30.00
	04	23,109	12.55	10.05	22.60
	05	19,357	16.79	15.52	32.32
	06	18,354	9.08	7.77	16.85
	07	21,675	16.89	15.20	32.08
	08	8,840	6.85	5.35	12.19
	09	13,814	13.60	11.96	25.56
	10	24,462	15.02	12.98	28.01
	11	28,949	16.65	14.75	31.41
	12	13,918	9.66	7.67	17.34
	13	15,745	15.42	13.14	28.56
	14	13,071	8.17	6.47	14.64
	15	11,195	11.21	9.40	20.62
	16	17,392	16.25	13.83	30.08
	17	14,356	15.43	13.67	29.10
	18	16,536	19.42	18.86	38.29
	19	20,940	16.51	14.10	30.62
	20	12,236	15.57	13.30	28.88

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
	21	20,715	14.69	11.86	26.56
	22	27,674	16.12	14.36	30.48
	23	11,541	12.45	10.71	23.16
	24	24,176	12.45	10.18	22.63
	25	33,661	19.55	17.65	37.20
	26	20,024	13.63	11.39	25.01
	27	18,883	16.98	14.87	31.84
	28	14,886	16.01	14.51	30.52
	29	12,886	10.80	9.42	20.22
	30	14,869	9.28	7.71	17.00
	31	8,865	14.69	12.75	27.43
	32	13,389	15.61	12.87	28.49
	33	12,868	15.27	11.66	26.94
	34	10,377	16.26	14.87	31.13
	35	16,775	16.73	13.96	30.69
	36	13,236	9.14	6.55	15.69
	37	17,640	17.87	14.28	32.14
	38	16,850	17.89	14.63	32.52
	39	15,393	17.08	14.28	31.36
	40	14,890	14.50	13.21	27.71
	41	33,190	18.08	16.70	34.77
	42	21,402	13.67	11.49	25.16
	43	23,925	21.06	19.14	40.20
	44	31,125	18.71	16.73	35.44
	45	35,348	18.34	17.03	35.37
	46	17,217	11.25	9.24	20.50
	47	11,421	18.23	18.51	36.73
	48	19,767	11.05	9.49	20.53
	49	28,438	17.38	16.22	33.60
	50	19,724	10.33	9.32	19.65
	51	22,934	17.65	15.61	33.26
	52	18,357	12.75	10.12	22.86
	53	14,590	10.49	9.99	20.49
Colorado	01	15,106	8.41	7.81	16.23
	02	15,481	6.78	6.22	13.00
	03	11,910	7.15	6.17	13.32
	04	13,854	7.65	7.13	14.78
	05	14,313	7.93	7.06	14.99
	06	19,896	8.32	6.82	15.14
	07	15,777	9.34	8.29	17.63
Connecticut	01	9,775	10.38	11.54	21.91
	02	9,075	11.53	10.73	22.26
	03	11,924	12.03	13.21	25.24

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
	04	13,212	10.38	14.00	24.38
	05	10,716	11.13	13.51	24.65
Delaware	00	13,657	10.75	12.40	23.15
District of Columbia	00	10,337	10.65	7.86	18.50
Florida	01	12,552	9.37	16.62	25.99
	02	11,918	8.64	18.86	27.50
	03	20,242	14.12	23.10	37.22
	04	16,513	10.94	16.88	27.82
	05	22,857	11.13	25.20	36.33
	06	16,000	11.62	20.60	32.22
	07	23,017	11.32	24.77	36.09
	08	27,549	12.34	29.15	41.49
	09	22,471	10.17	25.90	36.08
	10	18,603	9.60	24.38	33.98
	11	22,273	11.37	28.83	40.20
	12	22,899	12.15	26.21	38.37
	13	21,706	10.65	31.85	42.50
	14	33,953	12.25	37.64	49.90
	15	29,211	12.11	31.48	43.59
	16	23,576	11.90	33.15	45.05
	17	27,306	14.34	31.41	45.74
	18	25,541	11.36	35.86	47.22
	19	27,851	12.03	33.99	46.02
	20	30,355	12.87	30.79	43.66
	21	25,063	13.22	32.23	45.44
	22	27,338	11.06	31.85	42.90
	23	30,197	13.29	34.42	47.71
	24	25,800	12.45	25.44	37.88
	25	33,658	13.63	36.39	50.01
Georgia	01	5,711	12.09	5.79	17.88
	02	3,708	13.01	5.15	18.15
	03	16,681	14.82	7.52	22.34
	04	17,514	15.70	8.29	23.99
	05	14,276	12.65	8.86	21.50
	06	13,611	9.95	5.99	15.94
	07	20,814	14.10	7.81	21.90
	08	8,367	15.51	5.67	21.19
	09	11,119	12.54	6.55	19.09
	10	6,953	11.04	5.45	16.50
	11	14,635	13.30	6.89	20.18
	12	6,158	12.83	5.45	18.29
	13	21,236	16.25	8.09	24.34

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
Hawaii	01	9,511	7.80	8.75	16.55
	02	16,781	9.67	14.02	23.69
Idaho	01	16,613	10.15	11.35	21.51
	02	8,469	7.97	7.81	15.78
Illinois	01	12,712	16.06	16.42	32.48
	02	20,061	17.59	15.25	32.84
	03	10,727	16.39	17.61	34.00
	04	8,583	15.06	20.38	35.43
	05	8,510	14.10	19.07	33.17
	06	9,018	13.66	15.21	28.86
	07	11,835	14.46	17.31	31.77
	08	11,347	13.22	13.60	26.83
	09	6,843	12.88	17.83	30.70
	10	7,524	11.67	14.15	25.82
	11	8,308	14.18	12.96	27.14
	12	5,223	14.31	8.63	22.94
	13	10,720	13.76	13.91	27.67
	14	12,057	14.32	17.63	31.95
	15	3,470	9.48	8.17	17.67
	16	8,164	12.91	12.46	25.37
	17	3,458	10.22	8.21	18.42
	18	3,747	10.78	8.45	19.24
	19	3,493	11.77	7.81	19.58
Indiana	01	11,537	15.13	12.53	27.65
	02	8,475	12.02	11.03	23.06
	03	7,584	11.18	11.77	22.94
	04	8,077	9.98	12.12	22.10
	05	9,630	10.04	11.52	21.56
	06	7,679	10.28	10.58	20.85
	07	11,521	13.36	12.98	26.33
	08	5,698	12.39	9.46	21.85
	09	5,852	12.30	10.41	22.71
Iowa	01	3,400	8.48	9.82	18.29
	02	3,066	8.26	10.97	19.21
	03	5,589	9.21	11.88	21.10
	04	3,302	8.60	10.58	19.17
	05	3,585	8.77	8.74	17.52
Kansas	01	2,738	7.58	5.51	13.08
	02	5,173	9.50	6.40	15.89
	03	8,200	9.91	6.33	16.24
	04	5,763	7.27	5.54	12.81
Kentucky	01	3,062	9.61	7.48	17.08
	02	5,267	10.22	8.52	18.74

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
	03	8,485	10.29	12.40	22.69
	04	6,421	10.74	9.43	20.17
	05	2,602	8.65	8.12	16.76
	06	6,481	9.32	9.30	18.62
Louisiana	01	6,985	10.69	9.02	19.71
	02	7,056	13.32	10.05	23.37
	03	5,331	11.96	7.68	19.62
	04	5,355	12.79	7.29	20.09
	05	3,779	13.01	6.62	19.63
	06	9,295	11.39	8.09	19.48
	07	4,194	9.48	6.17	15.67
Maine	01	7,935	9.68	15.35	25.03
	02	6,304	8.22	16.06	24.27
Maryland	01	11,931	11.65	9.26	20.91
	02	11,909	14.06	9.34	23.39
	03	13,801	11.94	9.50	21.44
	04	21,336	16.63	14.65	31.29
	05	23,694	16.50	12.68	29.18
	06	11,692	12.86	11.06	23.91
	07	12,561	12.87	9.92	22.79
	08	12,869	12.28	12.22	24.50
Massachusetts	01	6,624	16.71	11.42	28.14
	02	9,127	17.30	12.39	29.69
	03	8,176	16.72	13.03	29.75
	04	7,230	14.90	10.51	25.42
	05	8,340	16.38	11.86	28.24
	06	7,338	15.84	11.80	27.64
	07	6,878	14.27	12.95	27.22
	08	6,183	13.51	11.67	25.18
	09	10,073	17.63	12.08	29.71
	10	10,048	14.83	10.96	25.79
Michigan	01	4,963	10.45	5.63	16.08
	02	6,353	12.44	6.82	19.27
	03	7,337	12.72	7.06	19.78
	04	5,933	11.45	6.41	17.85
	05	8,059	17.44	6.07	23.50
	06	7,274	10.99	6.34	17.34
	07	8,075	13.29	7.80	21.09
	08	9,397	12.31	7.03	19.34
	09	9,571	13.66	7.54	21.19
	10	8,465	13.04	7.72	20.74
	11	10,298	14.50	7.28	21.78
	12	12,351	16.34	7.58	23.92

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
	13	11,742	23.28	5.80	29.08
	14	14,642	24.28	6.25	30.54
	15	9,916	16.25	7.30	23.56
Minnesota	01	4,290	9.95	7.96	17.93
	02	11,090	10.96	9.84	20.80
	03	9,928	11.14	10.53	21.67
	04	7,739	11.35	12.16	23.50
	05	9,025	11.65	11.42	23.07
	06	11,206	12.51	10.53	23.04
	07	4,130	10.56	7.96	18.52
	08	7,303	11.09	10.40	21.48
Mississippi	01	7,587	18.82	5.38	24.20
	02	6,569	19.64	5.85	25.48
	03	4,756	14.77	5.46	20.25
	04	5,921	13.74	5.86	19.59
Missouri	01	13,869	17.47	5.64	23.12
	02	6,476	11.07	4.95	16.03
	03	8,002	12.17	5.19	17.36
	04	4,770	10.87	4.44	15.30
	05	12,089	13.26	5.08	18.34
	06	7,316	11.01	4.47	15.49
	07	6,261	9.89	5.31	15.19
	08	3,262	10.46	4.34	14.81
	09	4,540	10.56	4.55	15.09
Montana	00	7,134	9.03	7.40	16.43
Nebraska	01	4,019	10.08	6.40	16.47
	02	6,228	10.84	6.32	17.15
	03	2,606	8.28	5.73	14.01
Nevada	01	35,911	17.91	17.60	35.51
	02	21,702	12.89	13.17	26.06
	03	51,500	16.64	16.89	33.53
New Hampshire	01	9,398	11.85	6.56	18.42
	02	8,186	13.25	5.83	19.07
New Jersey	01	9,631	14.67	16.15	30.82
	02	12,037	12.91	17.39	30.30
	03	10,992	12.69	16.35	29.04
	04	10,748	11.36	16.98	28.34
	05	8,911	10.26	15.81	26.07
	06	8,655	11.81	19.99	31.80
	07	7,509	10.70	17.56	28.25
	08	9,645	12.82	24.37	37.18
	09	8,605	11.13	20.56	31.69
	10	10,818	14.88	30.84	45.72

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
	11	7,338	9.39	15.85	25.24
	12	8,956	10.67	16.08	26.75
	13	9,692	12.41	26.58	38.99
New Mexico	01	8,687	7.70	9.42	17.13
	02	4,707	6.85	8.39	15.23
	03	6,902	7.51	9.16	16.66
New York	01	18,203	13.42	17.36	30.78
	02	16,002	15.31	21.19	36.51
	03	12,120	13.40	14.86	28.26
	04	14,296	15.06	18.88	33.95
	05	6,853	9.93	11.00	20.93
	06	14,939	16.69	21.26	37.95
	07	6,712	13.29	16.06	29.35
	08	3,286	5.80	8.86	14.67
	09	7,536	11.43	15.15	26.57
	10	9,659	12.84	25.94	38.79
	11	5,188	11.64	19.43	31.07
	12	4,679	11.35	20.50	31.84
	13	8,777	12.07	12.61	24.68
	14	3,021	4.28	4.90	9.17
	15	935	8.14	13.11	21.28
	16	1,899	13.95	21.75	35.70
	17	8,309	13.52	15.25	28.78
	18	8,445	10.55	9.84	20.39
	19	11,854	12.93	11.33	24.26
	20	7,986	13.05	10.77	23.82
	21	6,263	12.48	11.90	24.37
	22	7,233	13.90	12.93	26.82
	23	3,348	10.69	8.33	19.03
	24	4,302	10.90	7.45	18.36
	25	4,617	9.92	8.90	18.82
	26	4,398	9.78	6.77	16.55
	27	4,324	10.33	5.98	16.33
	28	5,488	9.98	8.25	18.24
	29	3,977	10.70	6.46	17.15
North Carolina	01	3,899	13.63	5.48	19.11
	02	6,916	12.99	5.75	18.74
	03	7,454	10.05	5.43	15.48
	04	8,166	10.95	3.98	14.93
	05	5,222	11.89	4.67	16.56
	06	7,469	12.42	4.96	17.37
	07	7,357	10.69	5.13	15.81
	08	7,100	12.04	5.35	17.39

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
	09	13,339	11.03	5.95	16.99
	10	6,362	12.30	5.58	17.89
	11	5,751	9.87	5.15	15.01
	12	10,609	12.23	6.18	18.42
	13	7,888	12.30	5.03	17.34
North Dakota	00	2,287	6.84	6.10	12.99
Ohio	01	8,848	12.40	10.47	22.88
	02	6,525	10.09	10.36	20.44
	03	8,154	13.25	12.03	25.28
	04	6,223	11.40	10.80	22.21
	05	4,986	10.27	11.19	21.46
	06	4,728	11.38	11.86	23.24
	07	8,002	11.95	11.13	23.07
	08	7,281	11.49	11.25	22.74
	09	8,364	11.85	12.80	24.65
	10	9,289	11.90	12.15	24.06
	11	12,105	16.81	13.37	30.18
	12	10,220	11.14	11.21	22.35
	13	9,136	11.32	13.94	25.26
	14	7,862	9.63	12.62	22.25
	15	7,938	10.80	11.65	22.46
	16	7,246	10.52	11.22	21.74
	17	8,343	12.36	16.08	28.43
	18	5,139	11.89	9.94	21.83
Oklahoma	01	8,842	8.40	8.36	16.75
	02	4,676	8.39	8.11	16.49
	03	4,987	7.68	7.44	15.12
	04	7,163	7.28	7.13	14.41
	05	8,981	7.93	8.65	16.58
Oregon	01	12,656	9.34	8.66	17.99
	02	13,122	10.16	10.27	20.42
	03	15,537	9.43	8.70	18.13
	04	10,364	8.70	7.22	15.92
	05	11,992	9.28	8.66	17.94
Pennsylvania	01	11,475	10.78	8.97	19.76
	02	10,438	10.87	9.37	20.22
	03	4,726	11.19	7.39	18.58
	04	6,934	11.50	7.36	18.86
	05	3,349	10.81	7.12	17.95
	06	7,613	9.50	8.18	17.68
	07	7,625	10.96	8.07	19.03
	08	7,726	12.08	8.35	20.42
	09	4,808	11.65	6.85	18.49

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
	10	6,471	12.30	9.92	22.22
	11	10,732	12.80	12.31	25.12
	12	4,821	11.88	7.04	18.94
	13	8,419	11.04	7.98	19.02
	14	7,660	12.25	7.02	19.27
	15	9,350	11.98	8.82	20.80
	16	5,656	9.85	8.34	18.19
	17	6,484	10.26	6.98	17.24
	18	7,839	11.81	6.95	18.77
	19	7,248	11.75	8.59	20.35
Rhode Island	01	6,979	11.61	11.00	22.61
	02	8,648	13.25	12.16	25.42
South Carolina	01	15,607	8.73	11.80	20.53
	02	11,431	9.67	9.93	19.60
	03	5,407	8.18	7.61	15.78
	04	7,773	9.39	10.06	19.45
	05	6,737	10.49	8.13	18.61
	06	6,535	10.81	8.86	19.66
South Dakota	00	3,254	7.81	8.60	16.41
Tennessee	01	5,522	10.99	4.81	15.81
	02	8,019	13.46	4.78	18.23
	03	8,050	14.98	4.35	19.33
	04	5,596	13.87	4.58	18.44
	05	11,735	13.47	4.13	17.59
	06	9,347	14.51	4.38	18.88
	07	11,088	15.24	4.24	19.49
	08	7,488	18.91	4.07	22.97
	09	14,673	21.08	4.76	25.84
Texas	01	4,894	8.20	3.89	12.08
	02	14,442	11.24	4.61	15.84
	03	13,167	8.46	4.37	12.84
	04	10,816	8.71	4.78	13.49
	05	10,516	9.68	4.82	14.50
	06	13,575	10.40	4.73	15.13
	07	12,313	8.48	4.09	12.56
	08	10,085	9.17	3.99	13.16
	09	14,495	10.41	4.40	14.81
	10	17,656	10.10	4.65	14.75
	11	4,896	7.17	2.87	10.03
	12	12,459	8.93	4.38	13.32
	13	4,143	8.28	3.61	11.88
	14	10,494	10.14	4.07	14.21
	15	7,560	9.89	4.28	14.17

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
	16	7,915	7.84	3.01	10.85
	17	7,499	7.72	3.85	11.57
	18	13,765	10.96	4.53	15.49
	19	4,701	6.41	3.51	9.91
	20	9,454	8.51	4.22	12.74
	21	13,235	7.73	3.91	11.64
	22	17,942	11.21	4.13	15.34
	23	10,512	9.31	4.33	13.63
	24	14,037	10.12	4.84	14.95
	25	10,172	6.76	3.64	10.40
	26	16,691	8.82	4.52	13.35
	27	8,693	8.90	3.69	12.58
	28	9,207	10.27	4.59	14.86
	29	10,642	9.75	3.76	13.51
	30	13,337	11.84	5.56	17.40
	31	9,983	7.30	3.80	11.10
	32	7,731	7.69	4.68	12.37
Utah	01	11,718	8.28	7.63	15.92
	02	13,591	9.63	10.06	19.69
	03	13,593	10.51	9.60	20.10
Vermont	00	4,423	8.19	12.39	20.57
Virginia	01	14,151	13.51	7.67	21.18
	02	11,045	9.87	5.31	15.17
	03	11,481	12.87	5.46	18.33
	04	11,269	12.95	5.64	18.59
	05	5,834	10.09	4.15	14.24
	06	5,580	10.55	4.57	15.13
	07	10,766	12.51	6.26	18.77
	08	11,487	8.91	7.64	16.56
	09	2,865	9.84	4.56	14.42
	10	19,925	12.07	9.70	21.77
	11	18,653	12.99	10.46	23.45
Washington	01	13,058	8.77	8.75	17.52
	02	14,488	10.46	8.95	19.42
	03	14,531	10.60	10.38	20.99
	04	8,286	7.16	5.15	12.30
	05	7,793	7.81	6.43	14.24
	06	14,290	10.57	9.30	19.87
	07	10,761	7.50	6.97	14.48
	08	16,603	10.91	9.68	20.59
	09	15,634	12.13	10.30	22.44

Enclosure IV

State	Congressional district	Estimated number of active loans	Estimated percentage of active loans in default	Estimated percentage of active loans in the foreclosure process	Estimated percentage of active loans that are seriously delinquent
West Virginia	01	2,099	9.85	5.80	15.67
	02	4,001	13.36	8.36	21.72
	03	2,059	10.87	4.81	15.69
Wisconsin	01	6,822	11.26	15.20	26.46
	02	4,437	10.02	13.41	23.44
	03	3,843	10.33	15.61	25.94
	04	10,824	14.73	15.48	30.20
	05	5,165	11.99	13.23	25.21
	06	4,185	10.92	13.29	24.21
	07	3,720	9.24	14.77	24.03
	08	4,101	10.33	14.36	24.70
Wyoming	00	4,442	7.72	3.92	11.64

Source: GAO analysis of LP data.

Enclosure V

Estimating Negative Home Equity

To estimate the extent of negative home equity among nonprime borrowers in major metropolitan areas, we used loan-level information from LoanPerformance's (LP) Asset-backed Securities database and house price indexes from the Federal Housing Finance Agency (FHFA) and S&P/Case-Shiller as of June 30, 2009. We also reviewed industry and academic literature concerning estimates of negative home equity and the methodologies and data used to generate house price indexes.

Comparison of House Price Indexes

FHFA and S&P/Case-Shiller publish a number of house price indexes covering different levels of geography. For the negative equity analysis in this report, we used the following indexes:

- *FHFA All-Transactions Index* (FHFA index)—Calculated using sales data from home purchases and appraisal information from mortgage refinancings. FHFA publishes both a national version and separate indexes for 384 metropolitan areas.
- *S&P/Case-Shiller Tiered Price Indices* (S&P/Case-Shiller index)—Calculated using sales data from home purchases and available for 17 metropolitan areas.[32] The indexes for each metropolitan area provide separate house price trends for low-, middle-, and high-priced homes within each metropolitan area. S&P/Case-Shiller also publishes a national house price index.

The FHFA and S&P/Case-Shiller indexes use the same basic methodology. The methodology measures average price changes for single-family homes (excluding new construction, condominiums, and cooperatives) based on sales (or for FHFA, sales and refinancings) of the same properties at different points in time. This approach requires that each property included in the index be sold or refinanced at least twice to form a pair of house values (valuation pairs) from which appreciation or depreciation can be measured. The use of repeat transactions on the same homes helps to control for differences in the quality of the houses in the data.

[32]Unlike the FHFA indexes, the S&P/Case-Shiller indexes do not always use the same geographic boundaries as the Office of Management and Budget's definitions of metropolitan areas. For example, S&P/Case-Shiller's geographic boundaries are more expansive for the New York City metropolitan area and more restrictive for the Chicago metropolitan area.

Although they use a similar methodology, the FHFA and S&P/Case-Shiller indexes use different data sources and weighting schemes, which contribute to differences in the rates of house price appreciation or depreciation that they show.[33]

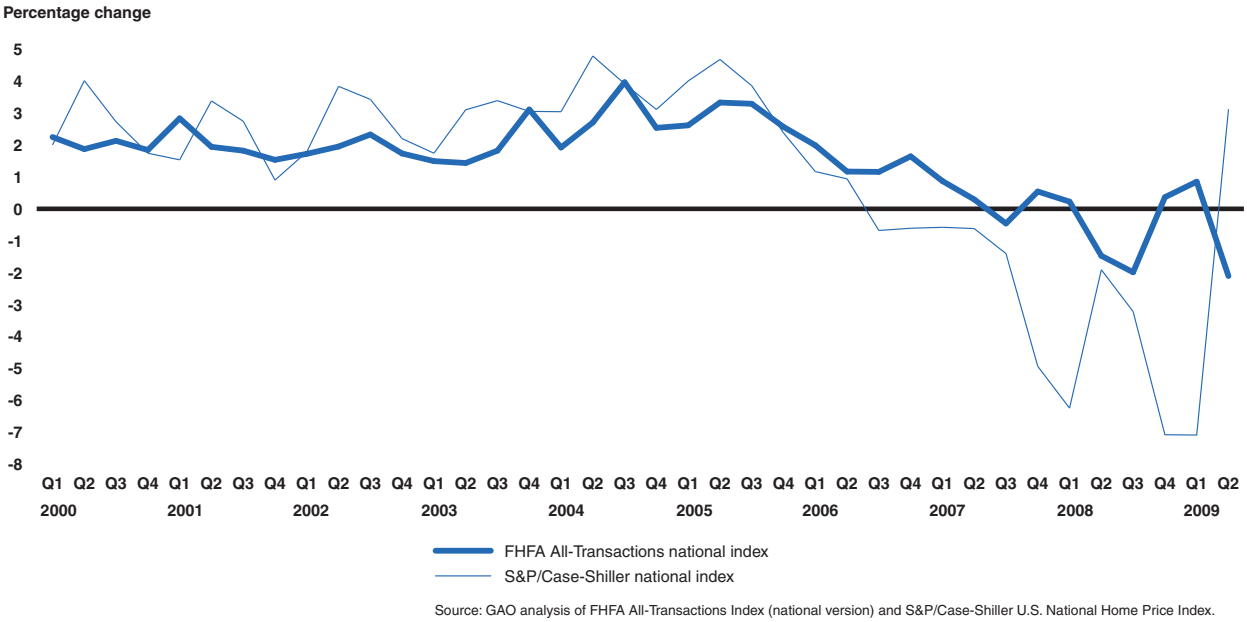
- *Data*—The FHFA indexes are based on data for homes with conventional, conforming mortgages—that is, mortgages purchased or securitized by Fannie Mae or Freddie Mac that meet the underwriting guidelines of those agencies. As a result, the FHFA indexes do not reflect homes with other types of financing. In contrast, the S&P/Case-Shiller indexes are based on data for properties with a wider range of financing—including subprime loans, jumbo mortgages, and mortgages guaranteed by the Federal Housing Administration or Department of Veterans Affairs—as well as mortgages purchased or securitized by Fannie Mae and Freddie Mac. Also, as previously noted, the FHFA indexes used in this report use both sales and appraisal data, while the S&P/Case-Shiller indexes use sales data only.[34]
- *Weights*—To limit the influence of atypical changes in the value of individual homes, the FHFA and S&P/Case-Shiller indexes assign weights to each valuation pair. However, they use different weighting schemes. For example, FHFA assigns lower weights than S&P/Case-Shiller to data for homes with lengthy periods between valuations. Additionally, the S&P/Case-Shiller indexes are value-weighted, meaning that price trends for more expensive homes have greater influence on estimated price changes than other homes. In contrast, FHFA's index is unit-weighted and therefore assigns each valuation pair the same weight, all other things being equal.

Because of these and other differences between the FHFA and S&P/Case-Shiller indexes, they historically have shown different appreciation and depreciation rates. Figure 7 illustrates the differences in the FHFA and S&P/Case-Shiller national indexes from the first quarter of 2000 through the second quarter of 2009. Particularly in recent years, the S&P/Case-Shiller index shows steeper increases and declines in home prices than the FHFA index.

[33]For a detailed discussion of this issue, see Office of Federal Housing Enterprise Oversight (OFHEO), *Revisiting the Differences between the OFHEO and S&P/Case-Shiller House Price Indexes: New Explanations*, (January 2008).

[34]FHFA also publishes house price indexes that use sales data only. These "purchase-only" indexes are available for the nation as a whole, for each Census division and state, and for 25 metropolitan areas.

Figure 7: Quarterly Changes in House Price Appreciation Rates, First Quarter 2000 to Second Quarter 2009

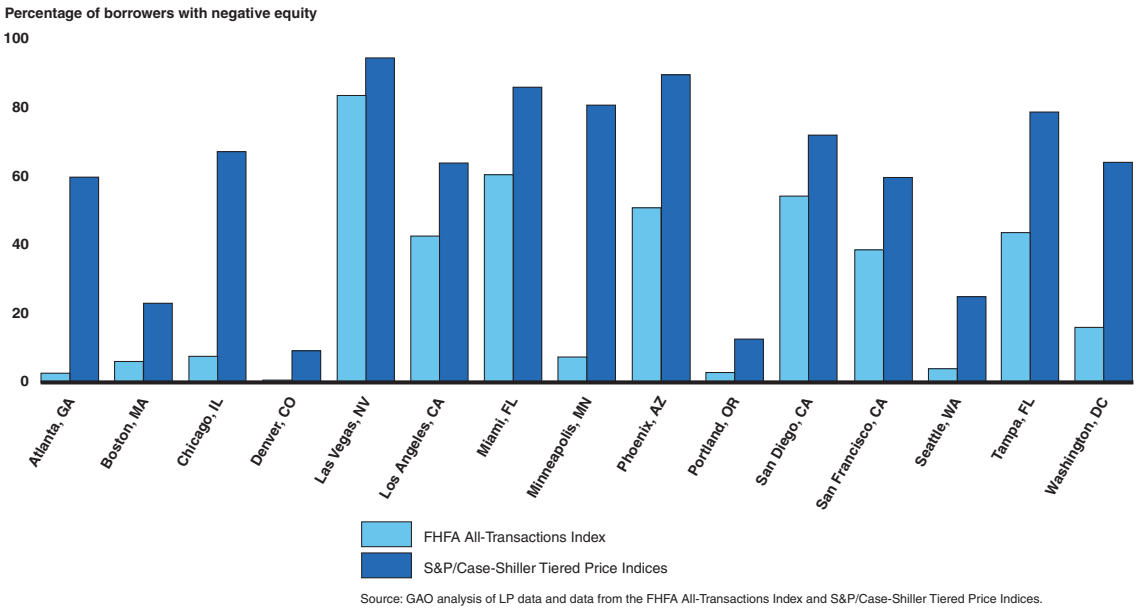


Source: GAO analysis of FHFA All-Transactions Index (national version) and S&P/Case-Shiller U.S. National Home Price Index.

To illustrate the impact of different house price indexes on estimates of negative home equity as of June 30, 2009, we compared estimates we made using the FHFA index and the S&P/Case-Shiller index. We limited the comparison to nonprime borrowers with active loans in 15 of the 16 metropolitan areas for which both indexes had identical geographic coverage.[35] Across all 15 metropolitan areas, the estimated percentages of nonprime borrowers with negative equity were lower using the FHFA index compared with the estimates we made using the S&P/Case-Shiller index (see fig. 8). The difference ranged from 8.4 percentage points in the Denver, Colorado metropolitan area to 73.1 percentage points in the Minneapolis, Minnesota metropolitan area.

[35]Both indexes also have identical coverage for the Cleveland, Ohio metropolitan area, but as of November 2009 the S&P/Case-Shiller index did not include 2009 data for that area. As a result, we did not estimate negative home equity for the Cleveland metropolitan area.

Figure 8: Estimates of Negative Equity in Selected Metropolitan Areas Using the FHFA and S&P/Case-Shiller Indexes



Source: GAO analysis of LP data and data from the FHFA All-Transactions Index and S&P/Case-Shiller Tiered Price Indices.

Methodology for Estimating Negative Equity

To estimate negative equity nationwide and across metropolitan areas, and for certain loan and borrower characteristics, we analyzed LP data and house price data from the FHFA index and the S&P/Case-Shiller index. We used LP variables for property state and ZIP code, loan origination date, loan origination amount, appraised property value at loan origination, and current loan balance. We also used LP variables indicating the loan class (subprime or Alt-A), loan purpose, loan product, and whether the loan was made to an owner-occupant to disaggregate our estimates by loan and borrower characteristic.

Our overall methodology was as follows. First, using the LP data, we identified first-lien loans originated from 2000 through 2007 that were still active (i.e., had not prepaid or completed the foreclosure process) as of the end of the second quarter of 2009 (June 30). Due to data limitations, our analysis did not account for any second liens that the borrowers had on their properties. To the extent that borrowers had second liens, our analysis may understate the extent of negative home equity. Second, we used Census data files and mapping software to associate the records for those loans (which contain the state and ZIP code of the mortgaged property) with house price index data (which are available by metropolitan statistical area or county). We excluded from our analysis loans for properties outside of the geographic areas covered by the house price

indexes.[36] Third, we estimated the extent to which the home associated with each loan had changed in value. To do so, we calculated the percentage change in the value of the corresponding house price index from the quarter the loan was originated through the second quarter of 2009. We then estimated the home's value at the end of the second quarter of 2009 by adjusting the appraised home value at loan origination by the percentage change in the house price index. Finally, we estimated the borrower's home equity by subtracting the loan balance at the end of the second quarter of 2009 from our estimate of the updated home value. When the loan balance exceeded the updated home value, we considered the borrower to be in a negative equity position. Because of data limitations, we could not identify borrowers with multiple mortgaged properties. To the extent that some borrowers had more than one mortgaged property, our results may overstate the actual number of individual borrowers with negative home equity.

To examine the extent of negative equity by loan origination year and nationally, we used the FHFA index and LP loan-level data for the 384 metropolitan statistical areas (MSA) that the FHFA index covered.[37] For each loan that was active as of the end of the second quarter of 2009, we estimated the borrower's home equity as of that date using the methodology described above. We then aggregated these loan-level estimates to calculate the number and percentage of borrowers with negative equity by annual loan cohort and for MSAs nationwide.[38] For borrowers with negative home equity, we calculated the total and median dollar amount of negative equity, as well as the distribution of borrowers across different ranges of negative equity (in terms of both dollars and a percentage of the current home value). Additionally, we used our loan-level estimates of home equity to calculate the number and percentage of borrowers nationwide with near negative equity—that is, home equity of 0 to 5 percent.

To estimate the extent of negative home equity in specific MSAs and by loan and borrower characteristic, we used the S&P/Case-Shiller index and LP data for 16 of the 17 MSAs that the indexes covered. As of November 2009, the S&P/Case-Shiller index did not include 2009 data for the Cleveland, Ohio MSA. As a result, we did not estimate negative home equity for that MSA. The S&P/Case-Shiller index includes separate indexes for homes in different price ranges—low, middle, and high. Accordingly, for each loan record, we used the home's appraised value at loan origination to determine the appropriate tiered index with which to update the home value. Using the methodology described previously, we estimated the borrower's home equity for each loan that was active as of the end of the second

[36]For this reason, we excluded 379,230 records (7.7 percent) from our analysis of 384 metropolitan areas using the FHFA index.

[37]A minimum of 1,000 observations per quarter are required for an MSA to be included in FHFA's index, so the number of MSAs the index includes can fluctuate from quarter to quarter.

[38]Our estimates of negative equity nationwide only reflect mortgaged properties in the 384 MSAs captured by the FHFA index. These MSAs account for about 84 percent of the U.S. population.

quarter of 2009. We then aggregated these loan-level estimates to calculate the number and percentage of borrowers in each of the 16 MSAs that had negative home equity at the end of the second quarter of 2009. We also aggregated the loan-level estimates by loan class (subprime or Alt-A), loan purpose (purchase, cash-out refinance, or no-cash-out refinance), loan product (fixed-rate mortgage, short-term hybrid adjustable-rate mortgage (ARM), payment-option ARM, long-term ARM, and other ARM), and borrower type (owner-occupant or nonowner occupant).

Enclosure VI

Demographic Characteristics of Nonprime Borrowers in 2005

Data limitations have complicated efforts to analyze the demographic characteristics of nonprime borrowers, such as race and ethnicity. Existing data sets either provide detailed information about nonprime loans but limited information about the borrowers (e.g., LoanPerformance data) or have more extensive information about borrowers but do not specify which loans are nonprime (e.g., Home Mortgage Disclosure Act data). To examine the demographic characteristics of nonprime borrowers with loans originated in 2005 (the peak year for nonprime originations), we extracted a 2 percent random sample of records in the LoanPerformance (LP) database and matched them to Home Mortgage Disclosure Act (HMDA) records. We achieved a match rate of approximately 74 percent, representing about 55,000 records. Of these, about 35,200 were for subprime loans and about 19,800 were for Alt-A loans. (See enclosure VII for a detailed discussion of our methodology.)

From our analysis of the matched loan records, we estimate that about 67 percent of the nonprime borrowers with loans originated in 2005 were White, while 14 percent were Black or African-American, and 4 percent were Asian.[39] Approximately 2 percent of the borrowers were American Indian, Alaska Native, Native Hawaiian, or Other Pacific Islander.[40] For about 14 percent of the borrowers, the HMDA data did not contain information about race. In addition, we estimate that 18 percent of nonprime borrowers identified their ethnicity as Hispanic or Latino.[41]

White borrowers accounted for a smaller estimated proportion of the nonprime mortgage market than they did of the mortgage market as a whole, while Black or African-American borrowers and Hispanic or Latino borrowers accounted for larger proportions. HMDA data for first-lien mortgages originated in 2005 for one- to four-unit properties indicate that approximately 74 percent of the borrowers were White and 8 percent were Black or African-American. Slightly more than 12 percent did not provide information on race. About 11 percent of borrowers in the HMDA data identified their ethnicities as Hispanic or Latino.

As shown in table 9, White borrowers accounted for a higher estimated proportion of Alt-A loans (73 percent) than subprime loans (63 percent). The same pattern was true for Asian borrowers. In contrast, we estimate that Black or African-American borrowers accounted for a higher proportion of subprime loans (17

[39]In this report, we use the race and ethnicity categories defined in the HMDA data. As previously noted, the LP data we used for our analysis do not cover the entire nonprime market but do cover the large majority of nonagency securitized mortgages within that market.

[40]In our data tables we combined these racial groups into an "other" category.

[41]Individuals who classify themselves as Hispanic or Latino include people of different racial backgrounds.

percent) than Alt-A loans (7 percent). Hispanic or Latino borrowers also accounted for a higher estimated percentage of subprime loans (19 percent) than Alt-A loans (15 percent), while the reverse was true for non-Hispanic or -Latino borrowers, who obtained 66 percent of the subprime loans and 73 percent of the Alt-A loans.

Table 9: Estimated Percentage of Nonprime Borrowers with Subprime and Alt-A Loans, by Race and Ethnicity

Borrower category	Number of borrowers	Percent	
		Subprime	Alt-A
Race			
White	36,721	63	73
Black or African-American	7,423	17	7
Asian	2,223	3	6
Other	924	2	2
Not reported	7,636	15	12
Ethnicity			
Hispanic or Latino	9,691	19	15
Non-Hispanic or -Latino	37,797	66	73
Not reported	7,538	14	13

Source: GAO analysis of LP and HMDA data.

Note: Figures in table are from our analysis of the approximately 55,000 loans for which we were able to match LP records with HMDA records. All percentage estimates in this table have 95 percent confidence intervals that are within plus or minus 0.7 percentage points of the estimate itself.

Across all races and ethnicities, most nonprime borrowers obtained a short-term hybrid adjustable-rate mortgage (ARM), the most common subprime mortgage product. However, higher estimated proportions of Black or African-American borrowers and Hispanic or Latino borrowers received short-term hybrid ARMs compared with other racial and ethnic groups (see table 10). For example, we estimate that about 69 percent of Black or African-American borrowers obtained a short-term hybrid ARM, compared with about 52 percent of White borrowers. The proportion of borrowers who obtained a payment-option ARM varied considerably by racial and ethnic category, ranging from about 3 percent of Black or African-American borrowers to 18 percent of Asian borrowers. Across all racial and ethnic groups, the estimated proportion of fixed-rate mortgages was more even, ranging from 18 percent for Hispanic or Latino borrowers to roughly one-quarter or more for White and non-Hispanic or -Latino borrowers.

Table 10: Estimated Percentage of Borrowers that Obtained Different Nonprime Loan Products, by Race and Ethnicity

Borrower category	Number of borrowers	Percent				
		Fixed-rate loans	Short-term hybrid ARM	Payment-option ARM	Longer-term ARM[a]	Other ARM
Race						
White	36,721	26	52	9	10	3
Black or African-American	7,423	21	69	3	5	1
Asian	2.322	21	44	18	13	4
Other	924	22	55	10	10	3
Not reported	7,636	27	54	8	9	2
Ethnicity						
Hispanic or Latino	9,691	18	63	9	7	2
Non-Hispanic or -Latino	37,797	27	52	8	10	2
Not reported	7,538	27	54	8	9	2

Source: GAO analysis of LP and HMDA data.

Note: Figures in table are from our analysis of the approximately 55,000 loans for which we were able to match LP records with HMDA records. Percentage estimates by race in this table have 95 percent confidence intervals that are within plus or minus 3.2 percentage points of the estimate itself. For ethnicity categories, the percentage estimates have 95 percent confidence intervals that are within plus or minus 1.1 percentage points of the estimate itself.

[a]Longer-term ARMs have interest rates that are fixed for 5, 7, or 10 years before adjusting.

In a follow-on study to this report, we will expand on this analysis by analyzing a larger pool of nonprime borrowers and examining the demographic characteristics of borrowers with troubled loans and negative home equity.

Enclosure VII

Matching LoanPerformance and Home Mortgage Disclosure Act Records

Data Sources

To describe the race and ethnicity of nonprime borrowers, we matched loan-level records from two primary data sources, LoanPerformance's (LP) Asset-backed Securities database and Home Mortgage Disclosure Act (HMDA) data compiled by the Federal Financial Institutions Examination Council. The LP database provides extensive information about the characteristics and performance of securitized nonprime mortgages. However, it contains relatively little information about borrowers, providing only credit scores and debt-service-to-income ratios.[42] In contrast, HMDA data contain limited information about loan characteristics and nothing about performance, but do provide information on borrowers' race, ethnicity, and income. HMDA data are estimated to capture about 80 percent of the mortgages funded each year and cover all major market segments, including nonprime loans. HMDA data should therefore capture most of the loans in the LP database.

While the LP and HMDA data emphasize different kinds of loan and borrower information, they do have some information in common. These common data items—including loan amount, loan purpose, loan origination date, property location, and loan originator—allow the two data sets to be matched on a loan-by-loan basis. We will discuss in more detail issues related to data compatibility and completeness that affected the matching process we developed.

To conduct our analysis, we extracted from the LP database a 2 percent random sample of loans originated in 2005 for a total of 74,079 loans.[43] We selected 2005 originations because the LP database showed the highest number of nonprime originations in that year. Our sample included conventional first-lien purchase and refinance loans to owner-occupants, investors, and owners of second homes. We excluded loans for units in multifamily structures and for manufactured housing, loans in Puerto Rico and the Virgin Islands, and loans with terms other than 15, 30, or 40 years.

We used the HMDA data file for 2005. As with the LP data, we focused on first lien purchase and refinance loans originated in 2005. We excluded loans in which the property type was something other than one- to four-family residential units. Because the LP database contained only conventional loans in private label

[42]The debt-service-to-income ratio is the borrower's total monthly debt service payments divided by monthly gross income.

[43]We also included some loans with origination dates in December 2004 or January 2006 if there was evidence to suggest those loans might have originated in January 2005 or December 2005, respectively, and therefore match to loans in the 2005 HMDA file. We discuss this origination month issue later.

securitizations, we also excluded loans that involved government programs—such as mortgages guaranteed by the Federal Housing Administration or the Department of Veterans Affairs—and conventional loans that were indicated as sold to Fannie Mae, Freddie Mac, Ginnie Mae, or Farmer Mac. This process resulted in 8,781,084 HMDA loan records.

Steps Taken to Make the Data Sets Compatible

Matching the loan records from the two data sources required us to make the common data items compatible. We were able to use a straightforward process for the loan amount and purpose that required only rounding the LP loan amount to the nearest $1,000 and aggregating the three LP refinance categories into one. However, the process was more complicated for origination date and property location.[44] We determined that the name of the loan originator was not particularly useful for making initial matches of loan records because this information was missing for a substantial percentage of the LP records. However, the originator's name was useful in assessing the quality of the matches that we made using other data elements.

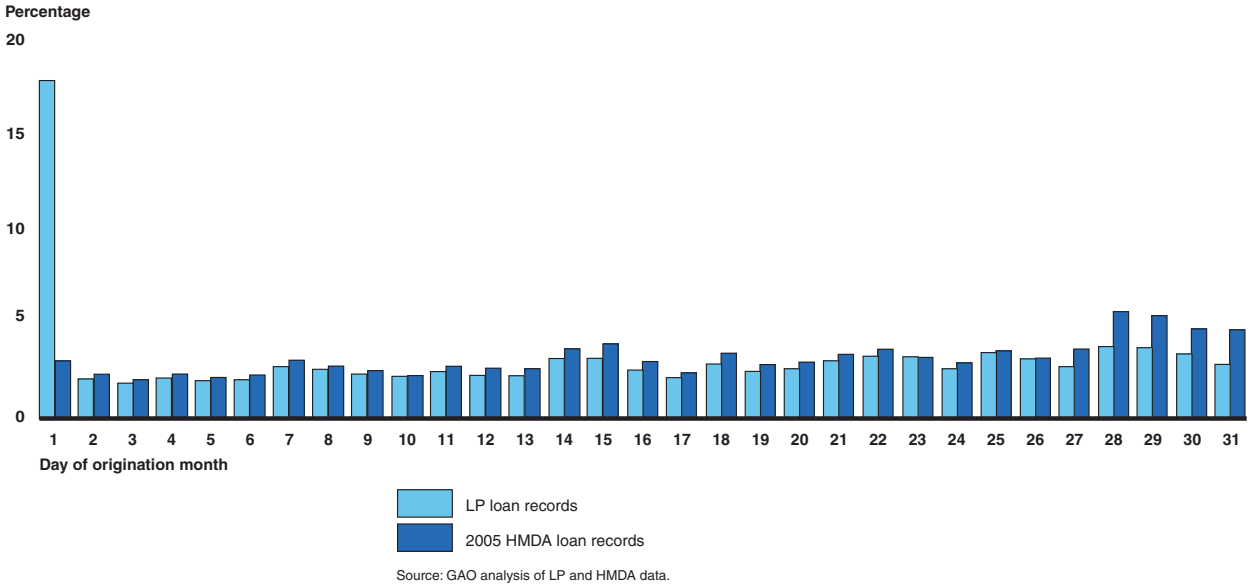
Loan Origination Dates

We found two issues with the origination date field in the LP data. First, almost 18 percent of loans in our LP sample had an origination date that was the first day of a month.[45] This distribution pattern was inconsistent with the distribution of origination days in HMDA, which showed a much more even pattern throughout the month, with an increase in originations toward the end rather than the beginning of each month (see fig. 9). Because of this inconsistency, we relied on origination month rather than origination day to match loan records.

[44]For privacy reasons, the origination date is omitted from each HMDA record when it is publicly released. We requested and obtained the date fields from the Federal Financial Institutions Examination Council, which compiles and publishes the HMDA data.

[45]This pattern reflects LP's practice of imputing the origination month for some loans based on the month in which the first payment is due. In these cases, LP records the origination date as the first day of the imputed origination month.

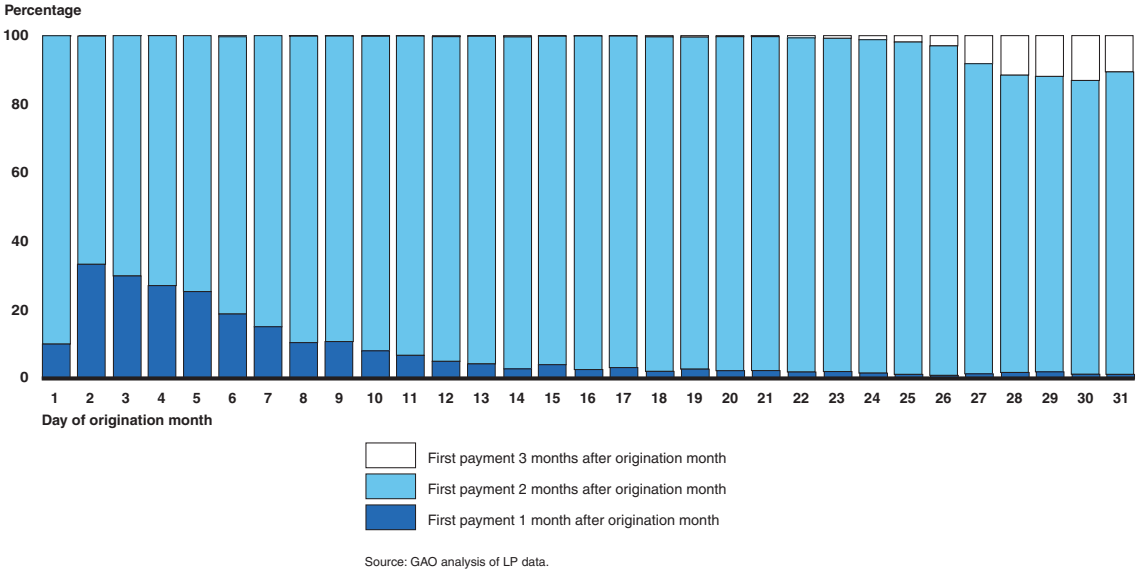
Figure 9: Distribution of Origination Days in the LP and HMDA Data



Source: GAO analysis of LP and HMDA data.

Second, the LP data showed that the first mortgage payment month was generally 2 months after the origination month but could also be 1 month—mostly for loans that originated early in a month—or 3 months—mostly for loans that originated later in a month (see fig. 10).

Figure 10: Relationship Between Origination Month and First Payment Month in the LP Data



Source: GAO analysis of LP data.

To address these issues, we matched some LP loan records twice, once using the origination month provided in the LP data and a second time using a replicated LP loan record (e.g., same loan amount and purpose) with an adjusted origination month. For the replicated records, we moved the origination month back a month if the first payment was due the next month and forward if the first payment was not due for 3 months. For instance, if a loan originated in April and the first payment month was due in May, we adjusted the origination month to March. But if a loan originated in April and had a first payment month of July, we adjusted the origination month to May.

Property Location

The LP and HMDA data provided different geographic identifiers for loans, with the LP data providing the ZIP code and the HMDA data the census tract. To facilitate record matching based on property location, we related the census tract information in the HMDA data to a corresponding ZIP code or ZIP codes in the LP data using 2000 Census files and ZIP code boundary files from Pitney Bowes Business Insight. Using mapping software, we overlaid census tract boundaries on ZIP code boundaries to determine the proportion of each census tract's area that fell within a given ZIP code area. For each census tract, we kept all ZIP codes that accounted for at least 5 percent of that tract's area. About 60 percent of census tracts were associated with only one ZIP code (meeting the 5 percent threshold), and almost all census tracts (97.5 percent) included no more than four ZIP codes. When a census tract was associated with only one ZIP code, all HMDA records in that census tract were candidates to match LP records in that ZIP code. All

HMDA records in tracts with more than one ZIP code were candidates to match LP records in those ZIP codes.

Matching Methodology

We matched loan records in the LP and HMDA data sets as follows. First, we made initial matches by identifying LP and HMDA loans with the same property ZIP code (based on the ZIP code-census tract combinations discussed previously), origination month, loan amount, and loan purpose. After finding all possible HMDA matches for each LP record, we classified these initial matches as either one-to-one matches (LP records with one corresponding HMDA record), one-to-many matches (LP records with more than one corresponding HMDA record), or nonmatches (LP records with no corresponding HMDA record). One-to-one matches accounted for 54.7 percent of our LP data set, one-to-many matches accounted for 30.9 percent, and nonmatches accounted for 14.3 percent.

We believe that the LP records that we were unable to match to HMDA records were similar in important respects to LP records that we could match. For instance, loans in subprime pools represented 61 percent of the overall LP sample and 61.5 percent of matched loans. Purchase loans represented 46.6 percent of the overall LP sample and 47.9 percent of matched loans. In terms of geography, state shares of unmatched and matched loans were similar. Loans in California represented 22.8 percent of the full LP sample and 22.5 percent of matched records. Further, subprime borrowers with unmatched records had a median credit score of 615, compared with 621 for matched records. Likewise, Alt-A borrowers with unmatched LP records and Alt-A borrowers with matched records had identical median credit scores of 709. Unmatched LP records in general had slightly higher loan amounts, with the differences between matched and unmatched Alt-A loan values being a little more pronounced. For instance, the median loan amount for unmatched Alt-A records was $259,000, compared with $227,250 for matched Alt- A records. This could be related to the somewhat greater representation in the set of unmatched LP records of loans in California, where house prices and loan amounts were high.

Quality Checks

We performed three types of quality checks on our initial one-to-one and one-to-many matches. First, we used information about the loan originator—information that was included in both the LP and HMDA data. The HMDA data clearly identified loan originators—referred to as “HMDA respondents”—using a series of codes that corresponded to a list of standardized originator names. But in more than 40 percent of the LP records in our sample, the originator name was marked as not available. In other cases, the originator was listed by a generic term such as “conduit,” or was an entity that appeared to be involved in the securitization process but was not necessarily the originator. Originators that were listed were often referred to in a number of ways—for example, “Taylor Bean;” “Taylor Bean

Whitaker;" "Taylor, Bean & Whitaker;" "TaylorBean;" "TBW;" and "TBW Mortgage Corp." all referred to HMDA respondent "Taylor, Bean & Whitaker." For LP loans with originator information, we standardized the originator names in the LP data, and we used these same originator names for the HMDA data. We compared the standardized originator names in matched records. If the standardized names matched, we classified the match as a robust match, and deleted any other HMDA records that might have matched to that LP record.

Second, for LP loans with no originator name, we examined the relationship between the HMDA loan originator and the issuer of the securities associated with the loan. Many institutions, such as Countrywide and Ameriquest, originated and securitized large numbers of nonprime loans. While some of these institutions identified themselves as the originator of a loan, some typically did not make the originator information available. In these cases, if the LP securitizer matched the HMDA originator, we classified an initial match as a robust match. If the issuer did not originate substantial numbers of nonprime loans, or also relied on other originators to provide loans for its securitizations, we developed criteria to check for evidence of business relationships between the issuer and various originating institutions. This check had two components. First, if within the LP data set we identified an originator-issuer combination, we defined that combination as a business relationship. Second, we considered combinations of originators from the HMDA data and issuers from the LP data. For an originator-issuer combination to be a business relationship, a combination had to appear at least five times in our set of initial one-to-one matches and meet one of two criteria. Specifically, either the originator must have made 5 percent of the issuer's securitized loans or the issuer had to have securitized 5 percent of the loans made by the originator. We classified initial matches for which such business relationships existed as robust matches.

Additionally, if none of these tests resulted in a robust match, we examined the loan origination day in the LP and HMDA data sets. If the days matched exactly, we classified an initial match as a robust match. Finally, for some one-to-many matches that shared originator, issuer, or business relationship characteristics, we examined the LP and HMDA characterizations of whether the borrower was an owner-occupant or not. In some cases, we were able to classify an initial match as a robust match if LP and HMDA owner-occupant characteristics matched. Overall, we produced robust matches for about 74 percent of the records in our LP data set, including about 78 percent of the loans in subprime pools and 69 percent of the loans in Alt-A pools (see table 11).

Table 11: Results of the Matching Process, LP to HMDA Loan Records

Market segment	Number of LP records	Initial matches to HMDA records		Robust matches to HMDA records	
		Number	Percentage	Number	Percentage
Subprime	45,175	39,040	86.4	35,196	77.9
Alt-A	28,904	24,413	84.5	19,830	68.6
Total	**74,079**	**63,453**	**85.7**	**55,026**	**74.3**

Source: GAO analysis of LP and HMDA data.

Enclosure VIII

GAO Contact and Staff Acknowledgments

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