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Long Island counties contain some of the country's highest concentrations of distressed nonprime mortgages. Moreover, at-risk loans attributable to negative borrower equity are clustered in the same small number of neighborhoods already facing distress. These factors may drive additional demand for critical counseling and related services.

Long Island Mortgage Distress: Analysis at the Neighborhood Level

New York State's relatively low share of homes with distressed nonprime mortgages is masking a more troubling reality on Long Island.¹ While New York's overall ratio of distressed mortgages to housing units is below that of many states, Long Island's Suffolk and Nassau counties have some of the highest ratios in the country. Furthermore, the majority of distressed loans in the two counties are concentrated in a small number of Zip codes. Accordingly, housing practitioners and program administrators grappling with this reality at the local level would benefit from information that systematically identifies the variation in severity and highlights the extent of the distressed mortgage problem in the neighborhoods that they serve.

This issue of *Facts & Trends* examines nonprime mortgage conditions in Long Island neighborhoods by using Zip-code-level data. We focus on the severity of Long Island's overall nonprime mortgage distress relative to other regions of the country and identify the specific Zip codes with greatest distress. We also consider the potential effect of falling home values on mortgage distress in these neighborhoods. This part of our analysis applies the concept of *negative equity*—a condition that occurs when a house is worth less than what is owed on the loan—and builds on national studies suggesting that borrowers with negative equity have a higher risk of defaulting on their mortgage.² Applying this concept at the neighborhood level, our analysis offers a fresh perspective on local mortgage distress by using a new data set that allows us to match housing values and first-lien loan balances by Zip code.³

Our study reveals that Nassau and Suffolk counties indeed have high concentrations of nonprime mortgage foreclosure and delinquency relative to New York State and the nation. Moreover, at-risk loans—attributable to negative borrower equity—are located primarily in those neighborhoods where distressed mortgages are already concentrated. These findings suggest that housing practitioners and program administrators may anticipate additional demand for counseling and other services among nonprime mortgage borrowers concentrated in the areas that are currently hardest hit.

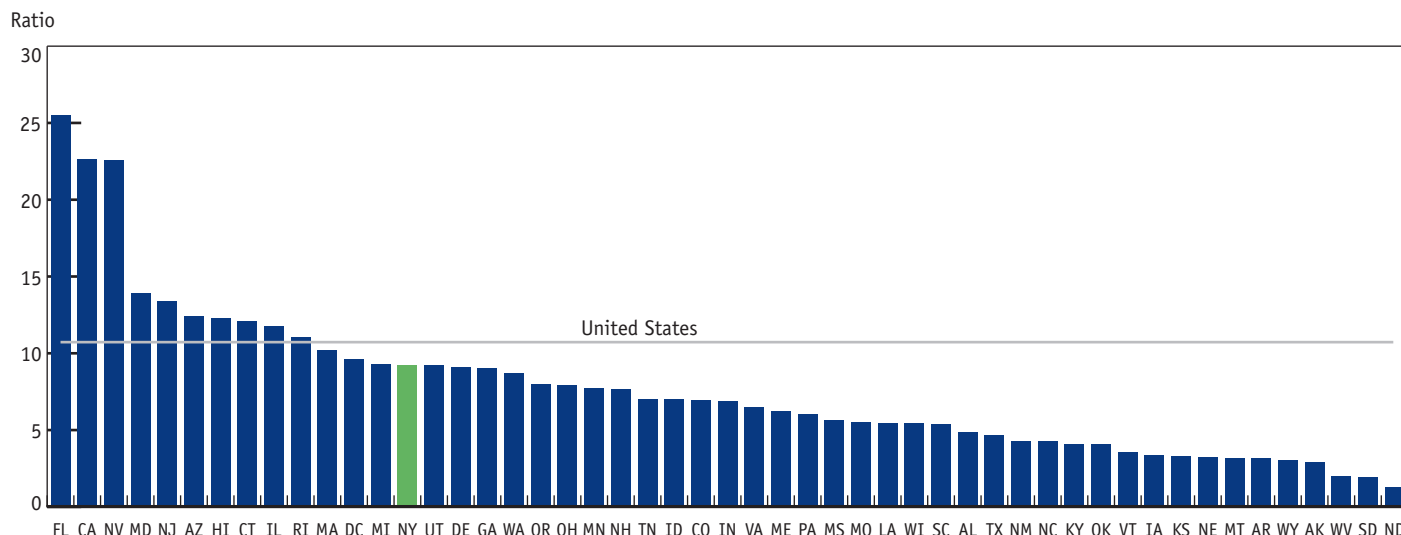
Long Island's Distressed Nonprime Mortgages

Delinquencies and foreclosures among nonprime mortgages are widespread across the United States, but they occur with varying levels of severity across regions. Our examination of these spatial patterns relies on certain key data and definitions:



Chart 1

Ranking of States by Distressed Mortgage Ratio



Sources: First American CoreLogic, LoanPerformance data; GeoLytics.

Note: The distressed mortgage ratio (DMR) is the ratio of nonprime distressed mortgages per 1,000 housing units.

- ▶ Our data source for mortgages is a rich national data set that includes securitized, first-lien nonprime residential mortgages—both subprime and alt-A—as of February 1, 2010 (see “About the Numbers”). The data set does not capture the entire market of nonprime mortgages and, as a consequence, the results of this analysis are limited to relative comparisons among neighborhoods.
- ▶ Our calculations of negative equity include only first liens because second liens are not consistently available for all loans. Consequently, our calculations are likely to underestimate negative equity. Inclusion of second liens would potentially raise debt and lower borrower equity.
- ▶ Our Long Island data set contains about 61,000 active nonprime mortgages, of which nearly 40 percent are distressed: 18 percent are at least ninety days delinquent, 21 percent are in foreclosure, and 2 percent are REO. Thus, we measure a stock of distressed loans at a particular time.
- ▶ To measure the severity of distressed mortgages, we use a ratio of nonprime distressed mortgages to housing units (DMR), calculated as the number of such mortgages per 1,000 housing units. This ratio is useful for comparing places of varying size and housing density, because numerous distressed mortgages might reflect the large size of a region rather than a high underlying distress severity. Note, however, that we do not control for the length of the

foreclosure process, which, for legal and other reasons, varies by state.

State-Level Data Mask Severity of Distressed Mortgages in Nassau and Suffolk

Our national comparison of DMRs reveals that New York is not among the states with the highest levels of distressed mortgages (Chart 1).

- ▶ New York’s DMR of 9 is near the middle of the range across states; it is below the U.S. DMR and well below the DMRs of the top three states: Florida, California, and Nevada.

New York’s mid-range DMR masks considerable intrastate variation in severity, a condition that is especially notable on Long Island. Our comparison of 544 U.S. counties with at least 1,000 active loans reveals that Suffolk and Nassau rank in the top 10 percent by DMR (Table 1).

County-Level Data Mask Severity in Certain Long Island Zip Codes

Variations in the severity of distressed mortgages also occur within Long Island, where DMRs range from 0 to slightly more than 100. The map groups Long Island’s Zip codes into three tiers of severity: those with DMRs of 32 or less, 33 to 66, and more than 66. We refer to the latter two tiers as “hotspot” Zip codes, because of their relatively high concentrations of distressed mortgages.⁴

Table 1

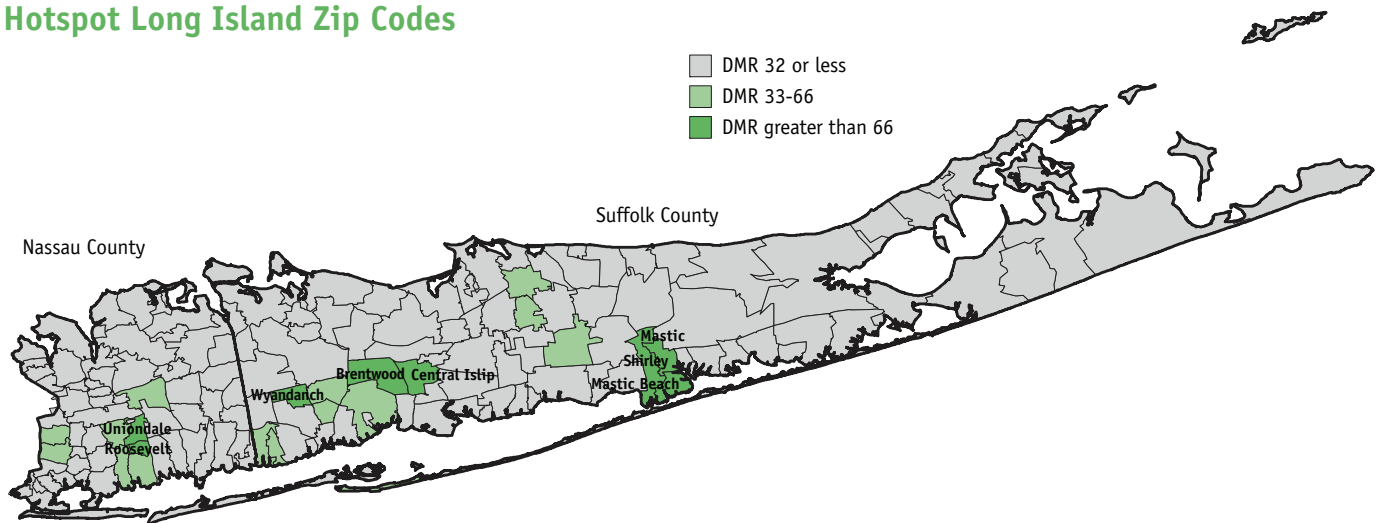
U.S. Counties Ranked by Distressed Mortgage Ratio

Ranking	State	County	Number of Distressed Mortgages	Number of Housing Units	DMR
1	FL	Miami-Dade	46,811	934,889	50.1
2	FL	St. Lucie	5,260	112,427	46.8
3	CA	San Bernardino	28,869	676,749	42.7
4	FL	Osceola	3,575	93,408	38.3
5	FL	Broward	30,991	817,076	37.9
6	CA	San Joaquin	8,377	224,490	37.3
7	CA	Riverside	28,056	752,141	37.3
8	CA	San Benito	610	17,028	35.8
9	FL	Flagler	1,572	44,151	35.6
10	FL	Lee	11,881	342,686	34.7
21	NY	Suffolk	15,025	548,771	27.4
44	NY	Nassau	9,488	458,642	20.7
		New York State	73,246	7,944,478	9.2
		United States	1,326,494	128,071,864	10.4

Sources: First American CoreLogic, LoanPerformance data; GeoLytics.

Note: The distressed mortgage ratio (DMR) is the ratio of nonprime distressed mortgages per 1,000 housing units.

Hotspot Long Island Zip Codes



Sources: First American CoreLogic, LoanPerformance data; GeoLytics.

Note: DMR is the ratio of nonprime distressed mortgages per 1,000 housing units.

- The twenty-two hotspot Zip codes account for half of all Long Island nonprime mortgages in distress (47 percent), but only a fifth of housing units (21 percent).
- The rest of the Zip codes, with DMRs ranging from 0 to 32, contain the remaining half of all mortgages in distress and four-fifths of housing units.
- The hotspot Zip codes include Hempstead and Central Islip, towns with some of Long Island’s lowest median incomes.

Falling Home Values Contribute to Emerging Risk

Having identified concentrations of nonprime mortgages where the borrowers are in distress, we turn to concentrations of *non*distressed borrowers who may be at risk of default because of recent declines in home values. When home values depreciate, borrowers can find themselves with negative equity. Because nonprime borrowers typically have little equity to begin with, even a small decrease in home values can leave them with negative equity. Borrowers with second mortgages are

Adjustments to Borrower Equity

To identify the nondistressed negative equity borrowers, we calculate an adjusted loan-to-value ratio for each loan in our sample. A ratio larger than 1 indicates that the balance owed on the loan exceeds the value of the home, which represents negative equity. For the numerator of our ratio (*L*), we use the reported outstanding balance on each loan as of February 1, 2010. For the denominator (*V*), we adjust the origination sales price (for purchases) or appraisal value (for refinancings) using a Zip-code-level House Price Index (HPI). For properties in Zip codes that do not have an index, we use a county-level HPI. To mitigate small-sample concerns, we use a three-month moving average of the HPI that includes all sales in the Zip code, including distressed sales.

even more likely to have negative equity.⁵ While not all nonprime borrowers with negative equity will default, one study finds that such borrowers are “twice as likely as those in positive equity to be seriously delinquent, or in default, on their first-lien mortgage.”⁶

Negative Equity and Default

Borrowers with negative equity are at greater risk of mortgage default largely because they have a limited range of options should they want or need to sell their home. For example, if a borrower loses her job, ordinarily she might sell the house, pay off the mortgage, and move to less expensive housing or to an area with better employment prospects. However, if she has negative equity, she is left still owing on the mortgage if she sells her house. With no clear path out of the mortgage obligation, she faces considerable obstacles whether she stays or leaves, and her possibility of default increases.

Even borrowers who can afford to continue paying their mortgage may have a weakening motivation as their equity declines and turns negative. If better housing options are available, borrowers with no home equity to lose might opt to default on the loan rather than continue to pay. These borrowers are sometimes called “strategic defaulters” or “walk-away homeowners.”

At-Risk Borrowers on Long Island

Given the link between negative equity and heightened mortgage default risk, we consider how recent declines in home values may have created a pool of negative equity borrowers, or “NEBs,” and whether these borrowers are concentrated in certain neighborhoods.

To identify the at-risk NEBs, we first isolate nonprime borrowers in our database whose mortgages are not distressed (that is, the individuals are current or less than ninety days late on their payments). We then account for changes in home values using a house price index. This allows us to calculate an adjusted equity amount for each nondistressed borrower and determine whether the amount is negative and, if so, by how much. Our calculations of negative equity are based on the month in which the loans were made and changes in home values at the Zip-code level. (The methodology is explained in the box.)

Next, we calculate the number of nondistressed loans for Suffolk and Nassau counties and New York State as well as the shares of NEBs (Table 2). The table also presents the percentages of nondistressed homes that decreased in value and the amount by which they changed.

- In Suffolk County, 82 percent of nondistressed borrowers’ homes have declined in value since mortgage origination, with a median value decrease of 18 percent. However, only one in five of the nondistressed borrowers are NEBs.

Table 2

Calculations of Negative Equity and Changes in Home Value

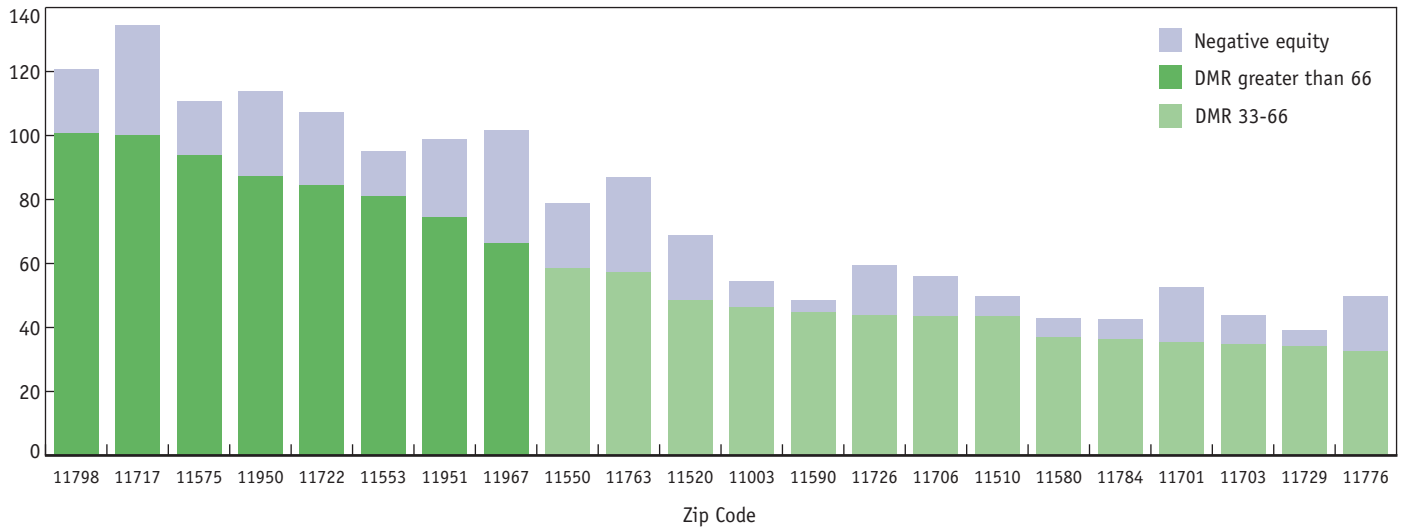
	Suffolk County	Nassau County	New York State
Number of nondistressed nonprime loans	20,782	15,634	135,888
Percentage with decreased home values	82	78	62
Percentage with negative equity	20	14	12
Change in home market values since loan origination			
Median percentage decline	18	16	15
Median percentage increase	10	9	11

Source: First American CoreLogic, LoanPerformance data and LoanPerformance House Price Index.

Chart 2

Mortgage Distress and Negative Equity in Hotspot Long Island Zip Codes

Loans per 1,000 housing units



Sources: First American CoreLogic, LoanPerformance data and LoanPerformance House Price Index; GeoLytics.

Note: DMR is the ratio of nonprime distressed mortgages per 1,000 housing units.

- In Nassau County, 78 percent of nondistressed borrowers’ homes have declined in value since loan origination with a median value decrease of 16 percent. Consequently, 14 percent of nondistressed borrowers have negative equity.
- Both Suffolk and Nassau counties have higher percentages of NEBs than New York State’s 12 percent.

Concentrations of At-Risk Borrowers on Long Island

We now consider how defaults on negative equity loans in Long Island might add to mortgage distress at the local level. Focusing on the hotspot Zip codes, we illustrate the potential effect of declining home values on these neighborhoods (Chart 2).

We start by assuming that present patterns of mortgage distress will persist. (The DMR bars, shown in light and dark green, correspond to the two hotspot tiers of severity in the map). We then consider how the concentration patterns would change if NEBs were to default. While the percentage of NEBs who might default is unknown, one assumption is that they all default (shown in blue in Chart 2).⁷ This assumption is not inconceivable, because second liens are not included in our calculations of negative equity. In any case, the relative pattern of negative equity by Zip code

points to concentrations of borrowers who may be at risk of default because of recent declines in home values.

- Grouping loans by Zip code, we find more than half of negative equity borrowers (53 percent) in areas where mortgage distress is already the most severe: the twenty-two hotspot Zip codes identified earlier.
- Even in areas where negative equity loans are less concentrated, defaults by NEBs could result in large proportional increases in mortgage distress and in demand for services.

Conclusion

Delinquency and foreclosure among securitized, nonprime first-lien mortgages affect a large share of housing units on Long Island compared with most other counties in the United States. The severity of this problem, however, is masked by New York State’s relatively low share of housing with mortgages in distress. Our study finds that variation extends down to the Zip-code level, where about half of Long Island’s distressed mortgages are on properties located in just 22 of the 221 Zip codes that make up Suffolk and Nassau counties. The detailed information derived from this type of local-level analysis can be useful for neighborhood housing program administrators and others who work to provide critical and timely homeowner assistance.

Our study also considers the relationship between declining home values and mortgage distress. When home values depreciate, borrowers can wind up with negative equity and be at greater risk of default. We find negative equity concentrated primarily in those Long Island neighborhoods where mortgage distress is already highest. Going forward, further research, along with the “ground-level” insight of housing practitioners, can build on our analysis by examining other factors that contribute to mortgage distress. These factors include high levels of consumer debt, rising unemployment, overly flexible underwriting terms, and the growing level of distress among borrowers with prime mortgages.

About the Numbers

Our loan data source is First American CoreLogic’s LoanPerformance data set. Loan figures are based on February 1, 2010, data for active mortgages on one-to-four-unit residential properties that have been pooled and packaged into securities assigned a grade of either subprime or alt-A. The underlying data do not represent every nonprime mortgage. We exclude balances on second liens. As of February 1, 2010, the data set provided monthly loan-level information on approximately 4.1 million active securitized loans with total balances of more than \$1 trillion. While the LoanPerformance data set captures more than 90 percent of securitized nonprime loans after 1999 and nearly 100 percent of the crucial 2003-05 vintages, it excludes all loans held in bank portfolios—loans that may look substantially different. Total housing units data are 2008 estimates prepared by Geolytics (<http://www.geolytics.com>). The map was created using ESRI software (<http://esri.com>). The House Price Index is from First American CoreLogic.

Notes

1. Our analysis uses a broad concept of distressed mortgages, which we define as nonprime mortgages that are severely delinquent (at least ninety days), currently in foreclosure, or REO (real-estate-owned by a financial institution). Nonprime mortgages consist primarily of subprime and alt-A loans. Compared with prime mortgage loans, subprime mortgages are typically of smaller value and made to borrowers with some blemish on their credit history. Alt-A, or “near-prime,” mortgages are typically larger value loans made to borrowers who, for a variety of reasons, may not choose to provide the documentation of income or assets usually required to obtain a prime mortgage.
2. See, for example, Andrew F. Haughwout and Ebiere Okah, “Below the Line: Estimates of Negative Equity among Nonprime Borrowers.” Federal Reserve Bank of New York *Economic Policy Review* 15, no. 1, July 2009.
3. For a local-level analysis of nonprime mortgages in New York City, see Ebiere Okah and James Orr, “Subprime Mortgage Lending in New York City: Prevalence and Performance.” Federal Reserve Bank of New York *Staff Reports*, no. 432, February 2010.
4. To identify the hotspots, we choose Zip codes with DMRs of 33 and above and with at least 200 distressed loans. We exclude data for which a Zip code was determined to be invalid.
5. However, recall that second mortgages are not included in our analysis, so our calculations of the amount of negative equity on Long Island are likely to be conservative.
6. Haughwout and Okah (2009).
7. Our analysis assumes that loans currently in distress will not be prepaid, or in some other way resolved, as additional loans become distressed. It also assumes that all negative equity borrowers want, or need, to sell; thus, the fact that these borrowers have not yet defaulted does not indicate that they are no longer at risk.

Additional resources, including tables, maps, and charts, are available at <http://www.newyorkfed.org/regional>.



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