



## Patterns of homeownership, delinquency, and foreclosure among youngest baby boomers

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**T**he recent decline in the housing market was preceded by strong growth for over a decade. From the fourth quarter of 1995 to the fourth quarter of 2005, homeownership rates increased from 65.1 percent to 69.0 percent.<sup>1</sup> In the 1990s and early 2000s, mortgage originations grew six-fold, from \$459 billion in 1990 to \$2.9 trillion in 2005. Over this same period, mortgage delinquency rates (around 4.5 percent) and foreclosure rates (around 1.2 percent) remained low between 2000 and 2005.<sup>2</sup>

After 2005, these patterns reversed, with homeownership rates falling and delinquency and foreclosure rates rising.<sup>3</sup> Recent data show homeownership rates fell to 66 percent by the fourth quarter of 2011. Delinquency rates rose to 9.4 percent in 2009 and foreclosure rates rose to 4.6 percent in 2010.<sup>4</sup>

This analysis considers the patterns of homeownership, delinquency, and foreclosure over this turbulent period in the

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Additional articles or information on homeownership are available online at the following links:

- “A comparison of 25 years of consumer expenditures by homeowners and renters,” <http://www.bls.gov/opub/btn/volume-1/a-comparison-of-25-years-of-consumer-expenditures-by-homeowners-and-renters.htm>.
- “Changing the treatment of shelter costs for homeowners in the CPI,” <http://www.bls.gov/opub/mlr/1982/06/art2full.pdf>.
- “Consumer spending patterns differ by region,” <http://www.bls.gov/opub/ils/pdf/opbils48.pdf>.

housing market for a cohort of Americans born in the years 1957 to 1964, the latter years of the “baby boom” that occurred in the United States from 1946 to 1964. Using the National Longitudinal Survey of Youth 1979 (NLSY79), this article shows the patterns of homeownership over a 20-year period, from 1988 through 2008. Respondents were ages 23 to 31 at the start of this period and ages 43 to 51 at the end. In addition, it examines transitions in homeownership between 2008 and 2010, as well as patterns of delinquency and foreclosure over the period from 2007 to 2010.

### Description of the dataset

The NLSY79 is a nationally representative sample of 12,686 men and women born from 1957 to 1964 and living in the United States at the time of the initial survey. Participants in the NLSY79 were first interviewed in 1979 when they were ages 14 to 22. Interviews for the NLSY79 were conducted annually through 1994 and biennially since 1994. The most recent data available were collected in 2010 when the respondents were ages 45 to 53. The NLSY79 collects a complete history of employment from its respondents, as well as the dates of marriages, divorces, and births of children. In addition, it collects detailed information on income at every interview and on assets at most interviews. Questions about homeownership, such as whether the respondent and

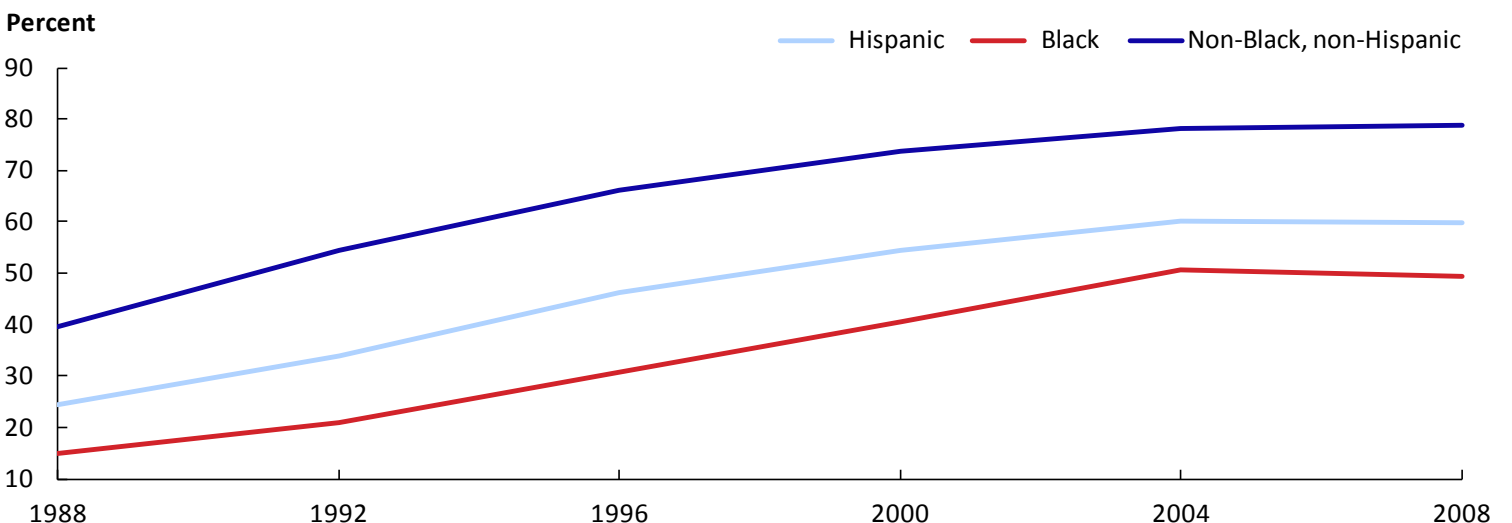
his/her spouse own their home, how much is owed on that home, and what the respondent believes the home would sell for in the current market, are included in the set of data items collected on assets. Though the assets questions were not asked in 2010, a special set of questions about mortgage delinquency and foreclosure were asked. These permit us to measure delinquency and foreclosure over the period from January 2007 to the 2010 interview. All statistics in this article are weighted to make the sample representative of the population from which the NLSY79 is drawn.

### Homeownership rates

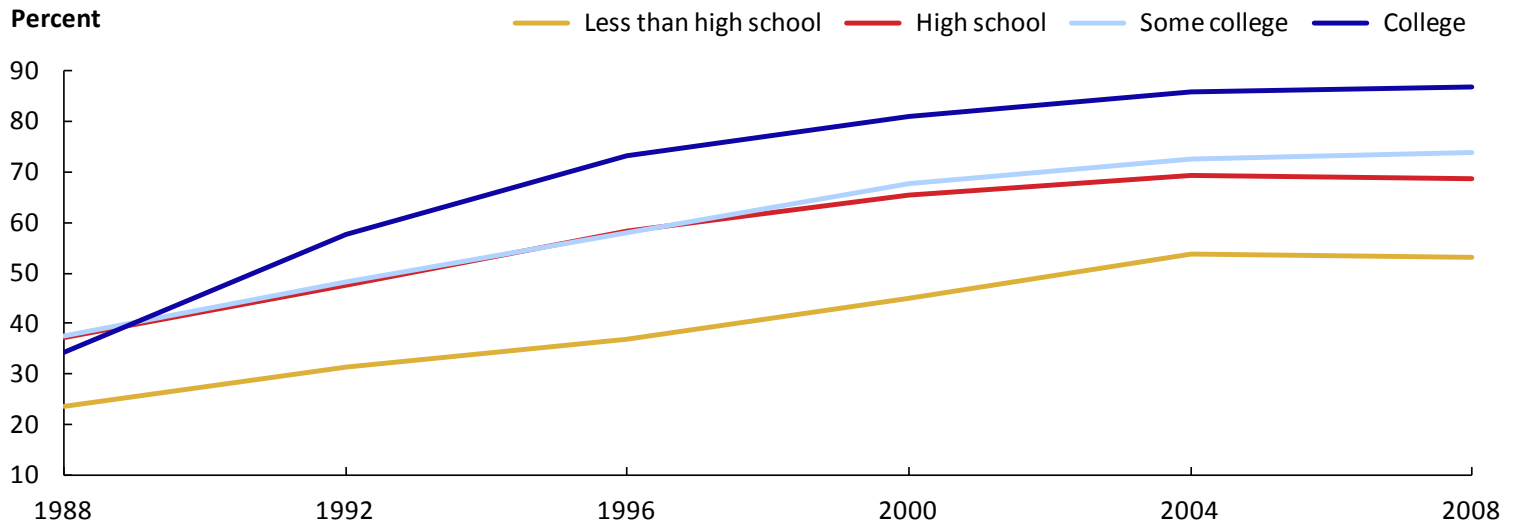
For the NLSY79 cohort, the rate of homeownership rose dramatically between 1988 and 2000. It is important to keep in mind that the NLSY79 sample members were ages 23 to 31 in 1988, and ages 35 to 43 in 2000. They reached ages when many would buy homes during a period in which homeownership and home prices were increasing in the United States. In 1988, 35 percent of the NLSY79 cohort owned a home. This rate had nearly doubled by 2000. Between 2000 and 2004, homeownership rose another 5 percentage points to 73 percent. The rate remained roughly steady between 2004 and 2008.

Chart 1 shows that the rates of homeownership over this period varied by race/ethnicity. Throughout this period,

**Chart 1**  
Homeownership rates in the NLSY79, by race/ethnicity, selected years



Note: Sample members of the NLSY79 are born from 1957 to 1964 and were living in the United States in 1979.  
Source: U.S. Bureau of Labor Statistics, National Longitudinal Survey of Youth 1979 (NLSY79).

**Chart 2****Homeownership rates in the NLSY79, by education, selected years**

Note: Sample members of the NLSY79 are born from 1957 to 1964 and were living in the United States in 1979.

Source: U.S. Bureau of Labor Statistics, National Longitudinal Survey of Youth 1979 (NLSY79).

Non-Black, non-Hispanics owned homes at higher rates than Blacks or Hispanics. Hispanics owned homes at higher rates than Blacks. In 2008, approximately 80 percent of Non-Black, non-Hispanics owned their homes, compared with 60 percent of Hispanics and 50 percent of Blacks.

When homeownership rates are examined separately by educational attainment, stark differences can be seen among groups. Though homeownership rates for those who did not complete high school double from about 25 percent to 50 percent over the 20 years examined here (1988–2008), this group was much less likely to own a home, compared with people who had higher education levels. (See chart 2.) Those who completed high school but did not go on to college, and those who had some college, owned their homes at approximately equal rates through 2000, but those rates diverged after 2000, with the rate for those with some college growing faster than the rate for those with high school only. In 2004 and 2008, the rate of homeownership was about 4 percentage points higher for those with some college, compared with those who completed high school (73 percent, compared with 69 percent). In 1988, college graduates owned homes at slightly lower rates than those with some college and those who completed high school but did not go on to college. In

all years after 1988, however, those who completed college owned homes at higher rates than the other groups, with the size of the differences increasing through 1996.

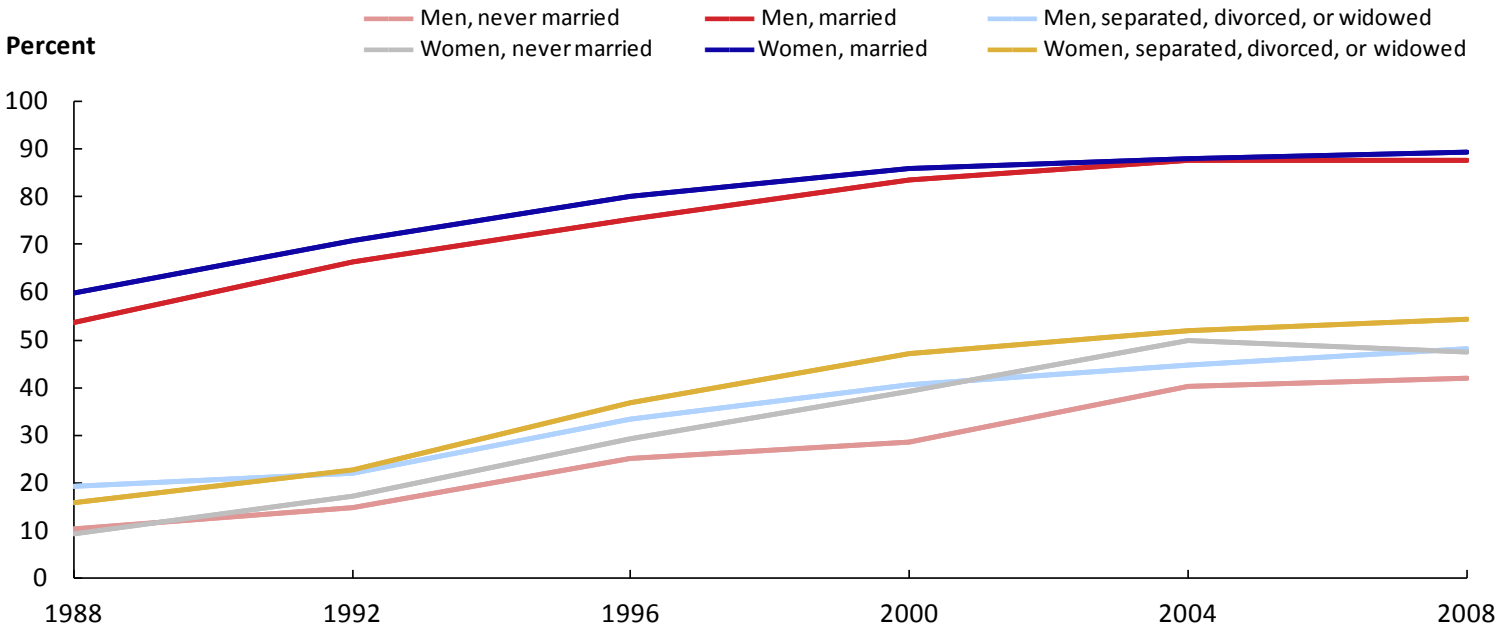
Married men and women are more likely to own a home, compared with those who are unmarried (See chart 3). From 1988 to 2008, homeownership rates for the married ranged from 54 percent (married men in 1988) to 90 percent (married women in 2008). By 2008, women who were separated, divorced, or widowed reached homeownership rates of 55 percent, but none of the other unmarried subsamples attained homeownership rates that fell in the range of those for married men and women. Men and women who were separated, divorced, or widowed owned homes at higher rates than their counterparts who had never married.

### Transitions in homeownership

Table 1 shows transitions in homeownership between 2008 and 2010. The first column of table 1 shows the composition of the NLSY79 sample in 2008. The racial/ethnic composition of the 2008 NLSY79 is about 79 percent non-Black, non-Hispanic, 14 percent Black, and 7 percent Hispanic. In 2008, the largest education group is those who had completed high school but had no college

## Chart 3

## Homeownership rates in the NLSY79, by gender and marital status, selected years



Note: Sample members of the NLSY79 are born from 1957 to 1964 and were living in the United States in 1979.

Source: U.S. Bureau of Labor Statistics, National Longitudinal Survey of Youth 1979 (NLSY79).

(42 percent of the sample). About 7 percent of the sample had not completed high school, and over 50 percent had at least some college. In 2008, over 60 percent of the sample is married and 57 percent have a child in the household. The second column presents homeownership rates in 2008 by characteristic. At that time, the rate of homeownership among all NLSY79 respondents was approximately 74 percent. The 2008 rates vary by race/ethnicity, education, marital status, and the presence of children.

The third and fourth columns of table 1 show the rates of transition into and out of homeownership between 2008 and 2010 by the various characteristics. For the sample as a whole, conditional on owning a home in 2008, the chance of owning a home in 2010 is quite high, at nearly 93 percent. With a couple of exceptions, the probability of owning a home in 2010 given ownership in 2008 is 90 percent or higher. Blacks, persons with less than a high school education, and men and women who are divorced, separated, or widowed have probabilities of below 90 percent of remaining homeowners in 2010.

Among the group who did not own a home in 2008, 14 percent owned a home in 2010. The transition rates into homeownership vary by subgroup, and the variability tends to move in the opposite direction as that for transitions out of homeownership. For instance, 9.3 percent of Black nonowners in 2008 became homeowners in 2010, a rate that is almost 5 percentage points lower than the transition rate for all nonowners. In contrast, of college-educated nonowners in 2008, 25 percent owned a home in 2010.

The last column of table 1 shows the percent change in homeownership between 2008 and 2010. Overall, homeownership rates fell by 2.1 percent from 2008 to 2010. Notably, for Blacks and for those who did not complete high school, the relative decline in homeownership between 2008 and 2010 was at least double that of the whole sample.

## Delinquency and foreclosure

For the subsample of NLSY79 respondents who reported owning a home between January 2007 and the 2010

**Table 1**

<b>Homeownership in 2008 and transitions between 2008 and 2010 in the NLSY79</b>					
<b>Characteristic</b>	<b>Composition of NLSY79 sample in 2008 (percentage)</b>	<b>Percent owning a home in 2008</b>	<b>Among 2008 homeowners, percent owning a home in 2010</b>	<b>Among 2008 non-homeowners, percent owning a home in 2010</b>	<b>Percent change in homeownership from 2008 to 2010</b>
<b>Total</b>	100.0	73.6	92.9	14.0	-2.1
<b>Race/ethnicity</b>					
<b>Hispanic</b>	6.5	59.7	90.0	12.2	-1.8
<b>Black</b>	14.2	49.3	85.1	9.3	-5.3
<b>Non-Black, non-Hispanic</b>	79.3	78.8	93.8	16.2	-1.8
<b>Education</b>					
<b>Less than high school</b>	7.4	53.3	86.9	10.3	-4.1
<b>High school</b>	41.8	68.1	91.1	11.9	-3.3
<b>Some college</b>	23.5	73.9	93.6	13.9	-1.5
<b>College</b>	27.3	86.7	95.3	25.0	-0.9
<b>Gender and marital status</b>					
<b>Men, married</b>	31.3	87.8	94.1	16.5	-3.6
<b>Men, separated, divorced, or widowed</b>	11.9	48.2	86.5	16.2	3.9
<b>Men, never married</b>	7.6	42.0	87.9	8.2	-0.8
<b>Women, married</b>	29.5	89.5	95.3	18.9	-2.5
<b>Women, separated, divorced, or widowed</b>	14.7	54.5	87.2	13.2	-1.8
<b>Women, never married</b>	5.0	47.3	90.8	10.3	2.3
<b>Presence of children</b>					
<b>Children in the household</b>	57.1	82.5	94.3	15.0	-2.5
<b>No children in the household</b>	42.9	61.4	90.3	13.4	-1.3

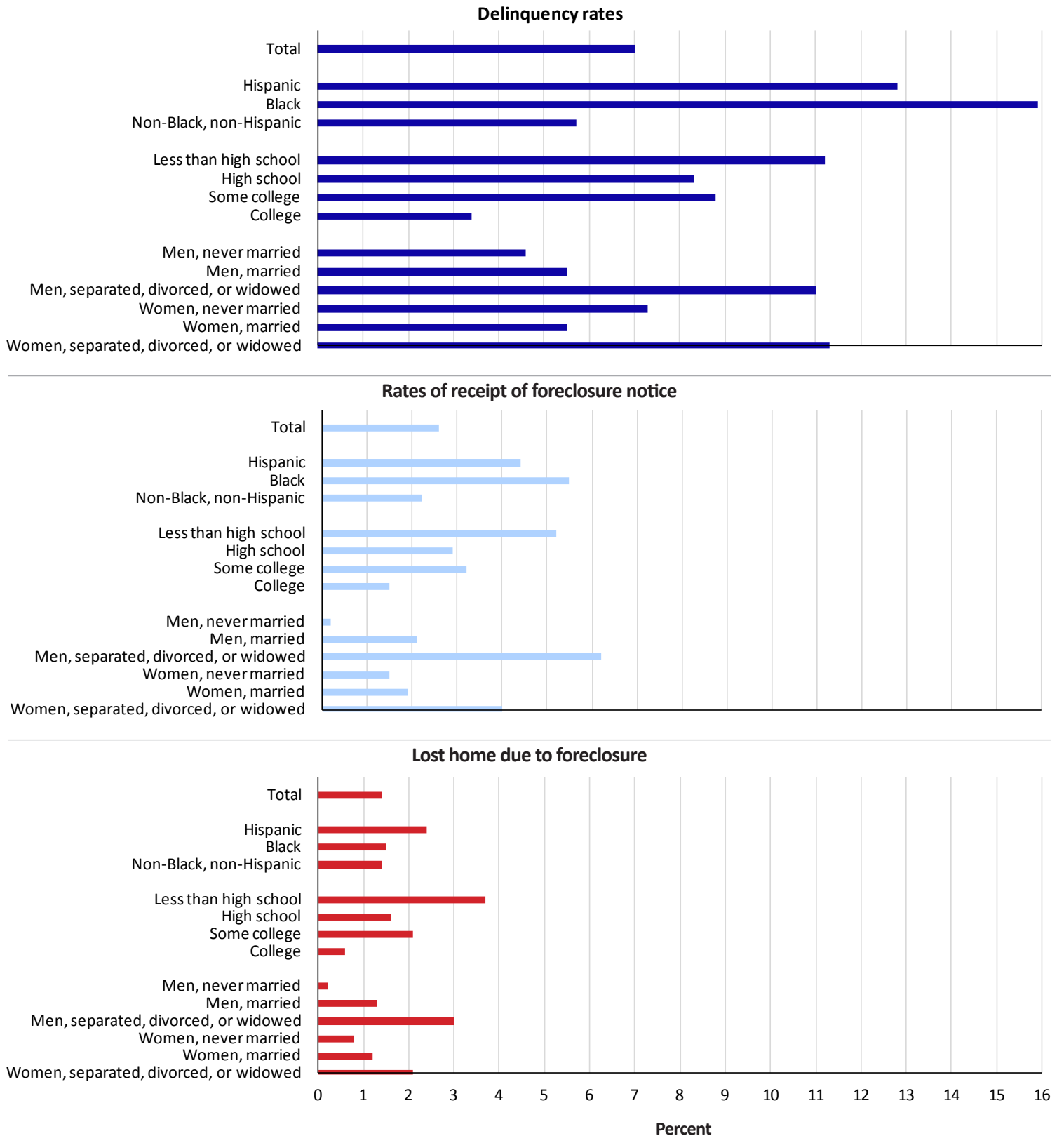
Note: Sample members of the NLSY79 are born from 1957 to 1964 and were living in the United States in 1979.  
Source: U.S. Bureau of Labor Statistics, National Longitudinal Survey of Youth 1979 (NLSY79).

interview, chart 4 examines the patterns of delinquency and foreclosure over that timeframe. In this group, 7 percent reported having been 2 or more months behind on their mortgage payments (or “delinquent”). A much smaller percentage received a foreclosure notice (2.6 percent) or lost their home due to foreclosure (1.4 percent). Just as homeownership rates varied by race/ethnicity, education, and marital status, the rates of delinquency and foreclosure vary substantially across subgroups. Compared with Non-Black, non-Hispanics, both Blacks and Hispanics were more likely to have been delinquent on their mortgages and to have received a foreclosure notice. Conditional on having been

delinquent on house payments, all three racial/ethnic groups are about equally likely to receive a foreclosure notice; however, Blacks were less likely to lose their home to foreclosure, compared with Hispanics or Non-Black, non-Hispanics. Those who did not graduate from high school were over three times more likely to have been delinquent on their mortgage, compared with college graduates. As education increases, homeowners in the NLSY79 cohort were less likely to have received a foreclosure notice and less likely to have lost their home to foreclosure. Men and women who were separated, divorced, or widowed were more likely to have fallen behind on their mortgage payments. They also were

**Chart 4**

**Rates of delinquency and foreclosure by race/ethnicity, education, gender, and marital status, from January 2007 to 2010, for those who owned a home during this period**



Note: Sample members of the NLSY79 are born from 1957 to 1964 and were living in the United States in 1979.

Source: U.S. Bureau of Labor Statistics, National Longitudinal Survey of Youth 1979 (NLSY79).

**Table 2****Housing outcomes for homeowners in the NLSY79, by housing characteristics and life events in 2008**

Characteristic	Composition of homeowners in 2008 (percentage)	Probability of housing outcome			
		Ownership in 2010	Delinquent on mortgage payments	Received a foreclosure notice	Lost home to foreclosure
<b>Total</b>	100.0	92.9	6.1	2.2	1.0
<b>Homeowner status in previous interviews</b>					
At every interview since 1998	73.0	96.0	4.7	1.5	0.6
At every interview since 2000	8.5	90.7	6.6	2.6	1.3
At every interview since 2004	9.4	88.3	10.1	3.4	2.2
Not a homeowner in 2004	9.1	79.7	10.6	4.4	2.3
<b>Market value of home in 2008 (in 2008 dollars)</b>					
More than \$350,000	25.8	95.1	5.3	1.8	1.0
Less than \$350,000 and at least \$150,000	41.9	93.6	6.5	2.6	1.3
Less than \$150,000	32.3	90.8	6.2	2.3	1.0
<b>Percent equity in home in 2008</b>					
More than 40 percent equity	68.5	94.7	3.1	0.9	0.3
Less than 40 percent and more than 0 equity	27.9	91.4	11.6	4.6	2.1
Negative equity	3.5	80.9	21.1	10.5	8.3
<b>Divorced or widowed from January 2007 to 2010 interview</b>					
Divorced or widowed	4.7	75.5	13.2	7.0	3.5
Not divorced or widowed	95.3	93.7	5.8	1.9	0.9
<b>Number of weeks unemployed from January 2007 to 2010 interview</b>					
Unemployed for 13 weeks or more from January 2007 to 2010 interview	9.0	85.9	15	7.2	3.5
Unemployed for less than 13 weeks from January 2007 to 2010 interview	91.0	93.5	5.3	1.7	0.8

Note: Sample members of the NLSY79 are born from 1957 to 1964 and were living in the United States in 1979.  
Source: U.S. Bureau of Labor Statistics, National Longitudinal Survey of Youth 1979 (NLSY79).

more likely to have received a foreclosure notice and to have lost their home to foreclosure.

## Housing outcomes

Table 2 shows housing outcomes for the group of NLSY79 respondents who owned homes in 2008—both as a whole and for subgroups. The housing outcomes presented in table 2 include homeownership in 2010, as well as delinquency on mortgage payments, receipt of a foreclosure notice, and losing one's home to foreclosure

during the period of January 2007 through the 2010 interview. The subgroups considered in this table are defined based on characteristics of the respondents' housing and on the occurrence of life events that may be related to circumstances that make homeownership more difficult.

The NLSY79 does not track how long the respondent has owned her home. Instead, whether the respondent owns a home at past interviews can be used to proxy for the length of time for which she has been a homeowner.

Homeowners in 2008 are divided into four groups based on their past reports about homeownership: (1) reported owning a home at past three interviews in which respondents were asked about homeownership (1998, 2000, and 2004 interviews); (2) reported owning a home at past two interviews in which respondents were asked about homeownership; (3) reported owning a home at 2004 interview; (4) reported not owning a home at 2004 interview. Over 70 percent of those who owned a home in 2008 owned at every interview in which they were asked about homeownership, going back to 1998. About 9 percent of this group did not own a home in 2004, when the survey last asked about homeownership.

Homeowners in the NLSY79 were asked to estimate the price for which their home would sell in today's market, and how much they owe on their home. At the interview in 2008, about a quarter of homeowners estimated that their home's market value was at least \$350,000. About 40 percent of homeowners estimated that their home's market value as less than \$350,000 but at least \$150,000. The remaining third believed that their home would sell for less than \$150,000.

The homeowners' reports on market value and debt can be used together to calculate the percent equity in the home. Nearly 70 percent of the 2008 homeowners had at least 40 percent equity in their home. About 28 percent reported equity of less than 40 percent and greater than zero percent of the home's value. A small percentage (3.5 percent) reported negative equity; that is, the respondent reported owing more on the home than his assessment of its market value.

In addition, life events that occur over the same period for which delinquency and foreclosure are measured can be calculated using the event history data in the NLSY79. About 5 percent of respondents were divorced or widowed and 9 percent were unemployed for 13 weeks or more, over the period from January 2007 to the 2010 interview.

For those who owned a home in 2008, the probability of homeownership in 2010 rises with how long

the respondent owned the home as measured by the number of successive interviews at which the respondent reports owning a home. The remaining columns of table 2 present the probability of the housing outcomes. Of those who owned a home at the three previous interviews, 93 percent owned a home in 2010. In contrast, for those who did not own in 2004, there is an 80-percent chance of owning a home in 2010. The probability of owning in 2010 varies relatively little with market value and with percent equity in one's home in 2008. The one exception is for respondents who held negative equity in their home in 2008. The group with negative equity had about an 81-percent chance of owning a home in 2010, compared with more than 90 percent for those with positive equity in 2008. In addition, relative to the sample as a whole, those who experienced a life event over this timeframe were less likely to own a home in 2010.

As expected, the same characteristics that are associated with a lower probability of homeownership in 2010 are also associated with delinquency, receipt of a foreclosure notice, and losing one's home to foreclosure. In the sample of 2008 homeowners, delinquency, foreclosure notices, and losing one's home occurred at rates of 6.1, 2.2, and 1.0 percent respectively. The chances of delinquency and of foreclosure fall with the number of successive interviews at which one owns a home. Those with negative equity had delinquency and foreclosure rates that were several times higher than those for the sample of all 2008 homeowners.

Lastly, divorce or widowhood and unemployment are associated with a greater probability of adverse housing outcomes—there is over twice the chance of delinquency and over three times the chance of receiving a foreclosure notice or losing one's home. For this cohort, homeownership rose substantially through 2004.

Among young baby boomers born from 1957 to 1964 and living in the United States in 1979, all groups experienced growth in the rates of homeownership, but over time, minorities and the less educated were less likely to own a home. Of those who reported



owning a home in 2008, 93 percent owned a home in 2010. Almost 7 percent of the sample and 6 percent of 2008 homeowners were delinquent on mortgage payments over this period. In addition, about 2 percent of homeowners received a foreclosure notice. Rates of delinquency and foreclosure were higher among those who experienced a life event, those who reported owning a home at fewer previous interviews, and those with negative equity in their home. ■

This **BEYOND THE NUMBERS** report was prepared by Alison Aughinbaugh, an economist in the Office of Employment and Unemployment Statistics. Email: [Aughinbaugh.alison@bls.gov](mailto:Aughinbaugh.alison@bls.gov). Telephone: 202-691-7520.

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### Notes

1. U.S. Census Bureau, Homeownership Rates for the United States: 1965 to Present (2012), Table 14. <http://www.census.gov/housing/hvs/>.
2. *Statistical Abstract of the United States: 2012* (U.S. Census Bureau, 2012) Table 1194. Mortgage Originations and Delinquency and Foreclosure Rates: 1990 to 2010, <http://www.census.gov/compendia/statab/2012/tables/12s1194.pdf>.
3. The State of the Nation's Housing 2008 (Joint Center for Housing Studies of Harvard University, 2008) <http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/son2008.pdf>.
4. *Statistical Abstract of the United States: 2012*, Table 1194.