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# Household Formation over Time: Evidence from Two Cohorts of Young Adults

Daniel Cooper and María José Luengo-Prado

**Abstract:**

This paper analyzes household formation in the United States using data from two cohorts of the national Longitudinal Survey of Youth (NLSY)—the 1979 cohort and the 1997 cohort. The analysis focuses on how various demographic and economic factors impact household formation both within cohorts and over time across cohorts. The results show that there are substantial differences over time in the share of young adults living with their parents. Differences in housing costs and business-cycle conditions can explain up to 70 percent of the difference in household-formation rates across cohorts. Shifting attitudes toward co-habitation with parents also play a role.

**JEL Classifications:** J11, D10, R20

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# 1 Introduction

There has been much discussion recently regarding the decline in the household formation of young adults both during and following the Great Recession. Many young individuals chose to live at home rather than move out to form their own households, while others moved back in with their parents after previously living independently. Numerous reports and articles with titles such as “More Millennials Living with Family Despite Improved Job Market” and “Boomerang Millennials Get Cozy at Home” have explored the recent household-formation behavior of young adults, as economists, sociologists, and others try to determine why the number of young adults living independently has decreased.<sup>1</sup> Understanding these changes in co-residence patterns is important because a decline in household formation has potential implications for homeownership, residential investment, wealth building, and fertility—factors that matter for both the macroeconomy and the well-being of young adults as they age. To date, much of this analysis has either examined household-formation patterns over time or focused on potential reasons for the recent decline in household formation. Less research has focused on how the predictors of household formation have potentially shifted over time (across cohorts of young adults). Our analysis helps fill this gap.

In particular, we use individual-level data from two different cohorts (1979 and 1997) of the National Longitudinal Survey of Youth (NLSY) to examine the factors that impact whether or not a young adult decides to form his/her own household rather than living with (his/her) parents (LWP).<sup>2</sup> With roughly 20 years separating the cohorts, we can study the changing pattern of household formation over time. We compare parental co-residence rates for individuals 23–33 years of age within and across cohorts and find

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<sup>1</sup>See <http://blogs.wsj.com/economics/2015/07/29/boomerang-millennials-get-cozy-at-home/> and Fry (2015), respectively. Other recent relevant articles, among others, include Dettling (2016) and Dey and Pierret (2014).

<sup>2</sup>We use the terms “LWP” and “household formation” interchangeably—a higher share of LWP corresponds to *lower* household-formation rates.

that the share of individuals who are LWP declines with age, but that the LWP share is noticeably higher at nearly every age for the 1997 cohort compared with the 1979 cohort. There is also substantial variation in household formation both within and across cohorts, based, among other factors, on race and housing costs. For example, a Hispanic youth in the 1997 cohort is roughly 20 percentage points more likely to be LWP than a non-black/non-Hispanic youth in the 1979 cohort. Similarly, members of the 1997 cohort living in areas that experienced high house-price growth are roughly 15 percentage points more likely to be LWP at age 23 than same-age youth from the 1979 cohort who lived in areas that experienced low house-price growth.

Even after controlling for differences in economic conditions and observed characteristics between the two cohorts, we find that members of the 1997 cohort are more likely to be LWP. That is, there has been a shift over time in the household-formation rates of 23–33-year-old individuals that cannot be easily measured or accounted for by observable factors. This gap in household-formation rates between the two cohorts goes away if we incorporate cohort-based differences in marriage rates and the number of children. These factors, however, are likely endogenous. In addition, we find that even though economic conditions were difficult at times for members of both cohorts, whether or not individuals are LWP in the 1997 cohort is much more sensitive to economic conditions than in the 1979 cohort. We conjecture therefore that attitudes toward LWP have become more favorable over time—a theory that is supported by evidence from the General Social Survey (GSS). The survey shows both increasing attachment over time of individuals to the place where they grew up and more favorable views of “older people sharing a home with grown children.”

Recent related academic work on household formation includes Bleemer et al. (2015), Dettling and Hsu (2014), and Paciorek (2016). Bleemer et al. (2015) use individual credit-bureau data from Equifax to examine household-formation patterns since 1999. They

analyze how debt, jobs, and housing prices contribute to the delay in household formation for 25-year-old individuals. Relative to our study, however, theirs is limited by the lack of demographic co-variates as well as by the fact that they are not certain whether an individual is living with his/her parent(s) or someone else.<sup>3</sup> In comparison, we consider a broad set of demographic and other factors and show that these have a noticeable impact on household formation. We also compare household-formation behavior between two time periods that are 18 years apart.

Dettling and Hsu (2014) also use Equifax data to analyze household formation. This research was completed concurrently with Bleemer et al. (2015), although Dettling and Hsu (2014) focus on how existing (student and consumer) debt along with debt repayment burdens and, most importantly, debt delinquency impact household formation. Their approach for determining co-residence in the Equifax data is more comprehensive than the one used by Bleemer et al. (2015), but Dettling and Hsu are still limited by a lack of demographic information about their respondents. Dettling and Hsu (2014) also focus on a rather narrow topic related to household formation—the impact of debt and debt delinquency. Our analysis of the factors impacting household formation is broader. Even though we have a much smaller sample, our analysis provides worthwhile insights for thinking about recent patterns in U.S. household formation.

Another related study, Paciorek (2016), examines household formation or headship rates by age group, using data from the Current Population Survey (CPS), the 1980 and 2000 decennial Censuses, and the American Community Survey. This analysis is perhaps the most closely related to our own, as the author considers how both economic and demographic factors impact household formation. Paciorek (2016) also uses data from two distinct time periods for part of the analysis (the 1980 and 2000 Censuses)

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<sup>3</sup>The authors only know whether or not a respondent is living with someone 15–40 years older, given the setup of the Equifax data. They argue that this broad definition is useful since they capture if an individual is living with his/her spouse’s parents, a non-parent relative, or a friend’s parent.

and observes that rising housing costs explain a large part of the decline in household formation between 1980 and 2000. In addition, he finds that the more-recent decline in household formation—between 2006 and 2010—is due in part to the rising unemployment rate. Paciorek (2016) further uses his results and data on the share of households by age group to predict U.S. household formation through 2020. A difference between his work and ours is that he focuses on household formation across the full age spectrum, while we provide detailed analysis of the household-formation behavior of young adults. By comparing two cohorts of young adults, we are able to show that some of the increase in household formation among 23–33-year-old individuals over time cannot be explained by observable factors. In addition, the longitudinal component of our data allows us to look at transitions in and out of parents’ homes. The remainder of this paper proceeds as follows: Section 2 describes the data and how we determine whether or not an individual lives with at least one of his/her parents. Section 3 describes our results, and Section 4 concludes.

## **2 Data: The Changing Pattern**

The data used in this paper come from two cohorts of the National Longitudinal Survey of Youth (NLSY)—a survey conducted by the U.S Bureau of Labor Statistics (BLS). The first cohort (the 1979 cohort) is a nationally representative sample of 12,686 youth who were 14–22 years old in 1979. These individuals were born between 1957 and 1965, and by the early-to-mid 1980s most were around 25 years old—an age when many young adults transition to living on their own. The second cohort (the 1997 cohort) is a nationally representative sample of about 9,000 youth who were 12–16 years old as of December 31, 1996. Born between 1980 and 1984, these individuals were about 25 around 2005 to 2010. Members of the 1979 cohort were surveyed annually between 1979 and 1993 and

have been surveyed biennially since 1994. The most-recent available data are for 2012, when the respondents were between 47 and 55 years old. Those in the 1997 youth cohort were surveyed annually from 1997 to 2011 and biennially thereafter. The most-recent available data are for 2013, when the respondents were 29–33 years old. The two cohorts are useful for studying changes in U.S. household formation over time, since the surveys cover two representative groups of youth entering adulthood roughly 20 years apart, and contain detailed information on the respondents’ living situations.

These two NLSY surveys—often referred to as the NLSY79 and the NLSY97—contain detailed information on the youth respondents’ education, employment history, and income, along with other demographic and financial information.<sup>4</sup> In addition, both NLSY surveys contain a so-called household roster, which tracks up to 17 individuals living in the same residence as the respondent, and notes their relationship to the youth. We use these data to determine whether the youth respondent is living with his/her parents as opposed to living independently. We define a youth as “living with parents” (LWP) if at least one biological, adoptive, or step-parent is present in the youth’s household in a given interview round.<sup>5</sup>

Figure 1 (top panel) shows the share of youth LWP in the 1979 cohort (solid line) compared with the share in the 1997 cohort (dashed line). Not surprisingly, the share of youth LWP is quite high when the respondents are young but declines somewhat rapidly after age 18, when they become legal adults and potentially move out of their parents’ homes to attend college or to start a career. The proportion of youth LWP is noticeably

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<sup>4</sup>Tables A.1 and A.2 in the Appendix provide relevant summary statistics for the two cohorts.

<sup>5</sup> There are differences across cohorts in how the NLSY handles respondents living in temporary quarters such as college dormitories. While respondents in the NLSY79 cohort are asked to answer the household roster questions with regard to their *permanent* residence, respondents in the NLSY97 are asked to report based on their permanent residence in rounds 1 to 6, but are asked to report on their current residence in later rounds. We focus our analysis on respondents 23 years old and older to make sure most respondents have finished school by the time we evaluate their LWP status. Either way, the difference in the treatment of respondents living in temporary quarters works *against* finding a gap in LWP across cohorts (NLSY79 respondents would be more likely to be classified as LWP, while NLSY97 would be more likely to be classified as not LWP).

higher for the 1997 cohort than for the 1979 cohort after about age 18. The gap in the shares of those who are LWP is the largest when youth are in their early 20s and closes a bit over time. Overall, the figure suggests that the household-formation rate for young adults has declined over time (share LWP has increased) across the age distribution.

As noted earlier, household formation occurs when individuals move out of their current residence and form a residence of their own—a process that can be reversed by individuals moving back in with their parents or combining their household with another one due to, for instance, marriage. Since we observe the same respondents in consecutive waves of each NLSY survey, we can track the young adults’ transitions to and from LWP starting at age 18. Figure 1 (bottom panel) shows the share of respondents, by age, who transition away from LWP (left panel) and the share who transition back to LWP (right panel).<sup>6</sup> Members of the 1997 cohort are much more likely to have moved back in with their parents—especially once they reached 22 years of age or older—than members of the 1979 cohort, and a higher proportion of the 1997 cohort left home before age 22, possibly to attend college.<sup>7</sup> Members of the 1997 cohort were also slower to leave their parents’ homes at older ages. These differences in transition rates and patterns across cohorts could reflect the different economic conditions faced by the respondents when they were deciding about their living situations as young adults. Indeed, these findings are consistent with recent anecdotal evidence suggesting that the rate of young adults moving back to live with their parents has increased following the Great Recession. Young adults are also said to have been waiting longer to move out of their parents’ homes in recent years.<sup>8</sup>

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<sup>6</sup>A respondent “moves out” if he/she lives *without* a parent at age  $X$  but is LWP at age  $X - 2$ . In contrast, a respondent “moves in” if he/she is LWP at age  $X$  but lives *without* a parent at age  $X - 2$ . The two-year transition rate is chosen because data collection becomes biennial for both cohorts within the period of analysis.

<sup>7</sup>This difference could be due, at least in part, to the NLSY having shifted to classifying 1997-cohort respondents based on their current residence, starting in wave 7.

<sup>8</sup>See, for example, “Its Official: The Boomerang Kids Won’t Leave; ” [http://www.nytimes.com/2014/06/22/magazine/its-official-the-boomerang-kids-wont-leave.html?\\_r=1](http://www.nytimes.com/2014/06/22/magazine/its-official-the-boomerang-kids-wont-leave.html?_r=1).



Our analysis focuses on individuals 23–33 years old. We start at age 23 because younger individuals may be attending college, while age 33 is the oldest age observed for individuals in the NLSY97 cohort.<sup>9</sup> Figure 2 depicts LWP in the 1979 cohort (solid line) compared with the share in the 1997 cohort (dashed line), with this age restriction (top panel), and also shows how household formation varies across three racial groups: non-black/non-Hispanics, blacks, and Hispanics (bottom panel). Blacks and Hispanics are more likely than non-black/non-Hispanic youth to be LWP.<sup>10</sup> The figure also shows that there have been shifts by race in the share of respondents LWP over time. In the 1997 cohort, non-black/non-Hispanic and Hispanic youths, regardless of age, were more likely to be LWP than their 1979 counterparts, while the rate of LWP for blacks was unchanged. In addition, the differences across cohorts in the share of respondents LWP by race are economically meaningful. For example, a Hispanic youth in 1997 is roughly 20 percentage points more likely to be LWP than a non-black/non-Hispanic youth in 1979. Overall, these results show that there is important variation in household formation by race both within a given cohort and over time—a result that suggests it is important to consider demographic shifts in the racial composition of the U.S. population when thinking about future patterns of LWP and/or household formation.

To further investigate differences in LWP across cohorts, we obtained geographic data for each youth respondent, specifically the state and the Core Based Statistical Area (CBSA, formerly MSA) where youth resided during each survey period.<sup>11</sup> These geographic identifiers allow us to examine how LWP varies geographically across cohorts. In particular, Figure 3 depicts the share of respondents LWP by state across the two

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<sup>9</sup>Comparisons starting at age 30 should be taken with some caution, as we observe many more 30–33-year-old individuals in the 1979 cohort than in the 1997 cohort.

<sup>10</sup>The share of black youth LWP is substantially lower at young ages in both cohorts, perhaps due in part to the high incarceration rate of black males (not depicted).

<sup>11</sup>These data were obtained under a restricted data access contract with the BLS, designed to protect the confidentiality of the respondents.

cohorts.<sup>12</sup> The darker-shaded states have a relatively larger portion of respondents LWP than other states, and the figure shows that there are more darker-shaded states for the 1997 cohort than for the 1979 cohort. The disproportionately large share of LWP respondents is especially true in California, the Northeast, and the mid-Atlantic areas, where higher housing costs and other factors in recent years have likely made it more difficult for young adults to live independently than in the 1980s.

The geographic identifiers also allow us to incorporate in our analysis location-based economic data—such as local economic conditions (unemployment rates) and housing costs—that are not otherwise available in the survey data. We obtain local unemployment rate data from the BLS, and we construct housing-cost data as the ratio of median home values relative to the median income of young adults in a given location. We focus on the median income of young adults, since it likely better captures their purchasing power than the median income of all workers, which is likely dominated by the earnings of prime-age individuals. (Based on typical age-earnings profiles, the wages of prime-age workers are likely higher than the wages of younger workers just beginning their careers.) Specifically, we calculate median income for 20–30-year-old individuals by state, using data from the March supplement of the Current Population Survey (CPS).<sup>13</sup> We obtain median home values using decennial Census data and location-specific (state or CBSA) house-price growth from CoreLogic. For example, the median house price in state X in 1983 equals the median house value in state X in the 1980 Census multiplied by 1 plus the growth rate of house prices in state X between 1980 and 1983. Similarly, the median house price in state X in 1986 equals the median house value in state X in the 1990 Census deflated by 1 plus the growth rate in house prices in state X between 1986 and

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<sup>12</sup>We measure the share of respondents LWP by state (and cohort) by pooling all respondents who are 23–33 years old in that state in any year of our sample for a given cohort and taking the mean of the LWP dummy variable.

<sup>13</sup>Our results are unchanged if we use alternative age cut-offs, such as ages 25–34, for calculating young adults' income.

1990. We use the prior Census for years ending in “5” (for example, 1980 Census for 1985 house prices).

Figure 4 depicts housing costs and unemployment rates by state and cohort.<sup>14</sup> The graphs show that young people in the 1997 cohort face, on average, higher housing costs than young people in the 1979 cohort (darker shades correspond to higher housing costs). Unemployment rates are also higher, on average, for the 1997 cohort, although the differences are not as striking. These differences across cohorts are due, at least in part, to the fact that youth in the two cohorts enter young adulthood at different points in the business and housing cycles and thus face different economic conditions. Figure 5 depicts variation in local economic conditions for the two cohorts over time (by state and CBSA). Note that respondents in the 1979 cohort are 23–33 years old between 1980 and 1996, while members of the 1997 cohort are 23–33 years old between 2002 and 2013. The graphs show that individuals in the 1997 cohort experience rising housing costs followed by high unemployment rates, while individuals in the 1979 cohort experience elevated unemployment rates but face mostly stagnant housing costs.

Overall, the data in Figures 4 and 5 show that there is substantial geographical variation in housing costs and unemployment rates both within and across cohorts. These location-based differences in economic conditions likely influence young adults’ decisions regarding LWP. In the next section, we analyze the factors that influence an individual’s likelihood of LWP in more detail—paying particular attention to the role of economic conditions in explaining differences in LWP across cohorts.

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<sup>14</sup>We depict average housing costs and unemployment rates of respondents by state (and cohort) by pooling all respondents who are 23–33 years old in that state in any year of our sample for a given cohort, and taking the mean of each variable.

### 3 Regression Results

In this section, we investigate who is LWP, both within and across cohorts, using a linear probability model.<sup>15</sup> This approach allows us to analyze patterns of household formation conditional on factors, such as age, marital status, and economic conditions, that are likely to affect whether or not a respondent is LWP. Our baseline regressions include respondents who are 23–33 years old—an age range that focuses on the main years for young adults to form their own households, and most likely avoids the potentially confounding effect of young adults moving in and out of their parents’ home while in college.

The dependent variable in all of our empirical specifications is an indicator that takes a value of 1 if the respondent is LWP in a given year and is 0 otherwise. The main controls are the respondent’s age, which we allow to enter nonlinearly by including dummy variables for each age in our sample, various demographic characteristics including race, region of residence, parental education, gender, an indicator for whether or not the respondent is enrolled in school, an indicator for whether or not the respondent has completed college, and an indicator for whether an individual grew up in an urban or a rural area as measured in his/her first interview.<sup>16</sup> Our baseline specifications also include state-level economic data to capture economic conditions (when respondents are a given age) that might impact household formation. In particular, respondents are probably more likely to be LWP when employment prospects are limited and/or housing costs are elevated. We also consider specifications that control for economic conditions at a more disaggregated (CBSA) level.

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<sup>15</sup>The results are qualitatively similar if we analyze LWP using a Probit model rather than a linear probability model (OLS). We employ the OLS approach for ease of interpreting our findings.

<sup>16</sup>To maximize the number of observations, we include dummy variable indicators for missing values in the set of regressors listed above, as needed.

### 3.1 Pooled Cohort Analysis

Table 1 summarizes the results from regressions that pool respondents from the two cohorts—an approach that allows us to examine whether there is a so-called cohort (or time) effect on household formation after controlling for observable demographic and economic factors. When we condition the estimates on age only, column (1), we obtain an average gap of 3.9 percentage points across the two cohorts. That is, young adults in the 1997 cohort are 3.9 percentage points more likely (conditional on age) to be LWP than members of the 1979 cohort—an effect that is very precisely estimated and is consistent with our earlier graphical evidence.<sup>17</sup> The estimates in column (2) show that female respondents are, on average, less likely to be LWP. In addition, individuals who are in school are more likely to live at home, but once they finish college they are more likely to live elsewhere. Hispanics and blacks have a higher likelihood of LWP, as do respondents living in the Northeast and those who grew up in urban locations. Those respondents with more-educated fathers are also less likely to be LWP. None of these findings are surprising, and including these additional demographic controls has little impact on the average gap in LWP between the two cohorts.

Column (3) in Table 1 controls for the state-level unemployment rate in addition to the demographic controls. This variable, as well as the housing-cost variable included in subsequent estimates, has been standardized to have a mean of zero and a standard deviation of one. We find that a one-standard-deviation-higher unemployment rate increases the likelihood of LWP by 1.2 percentage points.<sup>18</sup> In addition, controlling for differences for state-level business-cycle conditions explains about 0.5 percentage points of the average (3.9 percentage point) gap in LWP between the two cohorts.

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<sup>17</sup>Robust standard errors are clustered at the individual level. Clustering at the state level yields nearly identical results.

<sup>18</sup>In our sample (across cohorts), one standard deviation of the unemployment rate is 1.9 percentage points.

Columns (4)–(7) incorporate housing costs (median home values relative to the median income of the young) to examine their role in explaining differences in LWP across cohorts. We measure income of the young two different ways using data from the CPS: (1) as *household* income for CPS households with heads ages 20–30, column (4); (2) as *individual* income of CPS respondents ages 20–30, columns (5)–(7). Arguably, using individual income for young adults is preferable, as the household-income measure considers only young respondents who are already living independently. Still, we present both measures for completeness, and ultimately the choice of how to measure the income of young adults has little impact on our findings.

The results show that, not surprisingly, higher housing costs increase the likelihood of LWP. One-standard-deviation-higher housing costs increase the probability of LWP by 2.8 percentage points when using household income, and by 3.2 percentage points when using individual income. More importantly, including housing costs helps explain a good portion of the difference in LWP across cohorts—the gap is reduced by over half relative to column (3), where we control only for demographics and unemployment rates. Overall, we can explain about 70 percent of the original LWP gap between cohorts when including all the demographic and economic controls in columns (4)–(5). The housing cost measure that uses individual income performs marginally better in this respect, and it will be our baseline housing-cost measure going forward. Allowing housing costs or the unemployment rate effects to vary by race (not shown) does not help to further explain the gap in LWP across cohorts, despite the large differences we observe in LWP by race in Figure 2. In sum, controlling for economic conditions—especially housing costs—substantially, but not completely, reduces the unexplained differences in average household-formation rates across NLSY cohorts.

We further explore whether additional controls, some potentially endogenous, help us explain the remaining gap in LWP between the two cohorts in columns (6)–(7). In

particular, in column (6) we control for whether or not the youth respondent is employed, as well as his/her NLSY derived “intelligence score.”<sup>19</sup> Respondents’ intelligence and current employment are, not surprisingly, negatively correlated with LWP, as gainfully employed and/or particularly smart young adults are more likely to have the means to live on their own. Including these measures, however, does little to explain the remaining LWP gap across cohorts. The gap disappears, though, if we include controls for marital status and whether or not the youth respondent has children—column (7). However, these controls are likely highly correlated with an individual’s decision to form his/her own household, and the results simply say that young adults in the 1997 cohort are less likely to be married or have kids than members of the 1979 cohort (see Tables A.1 and A.2 in the Appendix for summary statistics by cohort).

Table A.3 in the Appendix repeats the estimates in Table 1, but uses a Probit model instead of a linear probability model. Our findings are essentially unchanged—indeed the estimated marginal effects from the Probit specifications are not statistically different from the coefficients obtained using a linear probability model.

### **3.1.1 Robustness: Using CBSA-level Variation in Economic Conditions**

While including state-level economic controls in our baseline analysis explains a large portion of the average LWP gap across cohorts, it is possible that we could explain more of the gap using economic data at a more local level. In particular, some states are large

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<sup>19</sup>Respondents in both cohorts are asked questions that allow the survey staff to derive an intelligence score, on a scale of 0 to 100, for each individual. The average score is 49.5 for the NLSY79 cohort and 51 for the NLSY97 cohort, consistent with the Flynn effect (increasing IQ scores over time). The intelligence measure for the 1979 cohort is based on an “Armed Forces Qualification Test” (AFQT), which measures four areas of intelligence: arithmetic reasoning, mathematics knowledge, paragraph comprehension, and word knowledge. Participants in the NLSY97 survey were given a computer adaptive form of the “Armed Services Vocational Aptitude Battery Test”—a test similar to the AFQT test. It also has four parts: mathematical knowledge, arithmetic reasoning, word knowledge, and paragraph comprehension. All the respondents in each cohort were eligible for the test, but some respondents chose not to participate. Individuals with missing information regarding the test in each cohort were assigned the average intelligence score for that cohort and flagged with a dummy variable in the regressions, indicating missing data. Excluding these individuals from the regressions does not affect the results.

and contain varied labor markets and housing markets that may not be characterized well by average state-level data. For instance, the labor and housing markets in New York City are quite different from the labor and housing markets in upstate New York cities such as Rochester or Buffalo. As a result, we repeat our analysis using data on economic conditions at the CBSA level (CBSAs tend to be more representative of local labor markets), and report results in Table 2. We focus on respondents living in large CBSAs, as data from the CPS, from which we obtain our measures of young adults' income, are noisy at the CBSA level—especially for smaller metropolitan locations.<sup>20</sup>

The number of observations for the regressions in Table 2 is much lower than in our baseline regressions because of the large-city sample restriction. Note, as well, that the gap between the cohorts in the average share of respondents LWP is larger when focusing on CBSAs (7.5 percentage points)—see column (1)—than in our (larger) baseline sample (3.9 percentage points). This result is consistent with our previous finding—see Table 1, column (2)—that growing up in an urban area makes young people more likely to be LWP. We can explain about 50 percent of this larger gap by including demographic and state-level economic controls, column (2), and about 70 percent by including CBSA-level economic controls instead. Being able to explain about 70 percent of the LWP gap across cohorts when using our sample of large cities and CBSA controls, is not much of an improvement compared with our baseline regressions using the larger sample with state-level economic controls. The setup in Table 1 will therefore remain our baseline specification. As before, including additional and potentially endogenous controls, such as marital status and having children, in our CBSA specification eliminates the gap. Including these additional variables, however, does not explain why respondents in the

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<sup>20</sup>Small cities have limited respondents in the CPS. The main cities of the large CBSAs included in our analysis are: Atlanta, Baltimore, Boston, Charlotte, Chicago, Cincinnati, Cleveland, Dallas-Fort Worth, Denver, Detroit, Hartford, Houston, Indianapolis, Las Vegas, Los Angeles, Miami-Ft.Lauderdale, Minneapolis-St.Paul, New York City, Philadelphia, Phoenix, Portland (OR), San Francisco-Oakland, San Jose, Seattle, Washington, DC.



more-recent cohort are delaying marriage and hence delaying having children, and thus LWP longer than members of the 1979 cohort.

### 3.2 Cohort-by-Cohort Analysis

Table 3 presents additional results that examine the impact of demographic and economic factors on LWP *within* each cohort. For this analysis, we pool all available observations on the youth respondents within a cohort, but keep cohorts separate. This approach allows us to determine whether the effect of a demographic or economic factor on respondents' likelihood of LWP has changed substantially over time. For example, this method allows us to compare whether the effect of housing costs on the likelihood of LWP is larger (or smaller) for the 1997 cohort than for the 1979 cohort. Without loss of generality, we report results based on the specification in Table 1, column (3); again, we focus on respondents who are 23–33 years old. Column (1) shows results for the 1979 cohort, column (2) presents results for the 1997 cohort, and column (3) (“Difference”) indicates whether the estimated effect is statistically different across cohorts at either the 10 percent, 5 percent, or 1 percent level of significance.<sup>21</sup>

Overall, the effect of demographic factors on the probability that someone is LWP is quite similar across the two cohorts, suggesting that, among these individual characteristics, there have been limited shifts in the predictors of household formation over time. The few factors that do have a significantly different impact across cohorts on the likelihood of LWP include being black, attending school, having missing information on urban/rural location in the first interview, and living in the Northeast (at the 10 percent level). Most noticeably, we find that while black respondents in the 1997 cohort are more likely to be LWP than non-black/non-Hispanics, the impact of being black on LWP is

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<sup>21</sup>As in Table 1, the regressions reported in Table 3 include dummy variables for the age of the respondent even though the coefficient estimates are not shown.

roughly half as large as it was for the 1979 cohort. In other words, blacks are becoming more similar to non-black/non-Hispanic individuals in terms of LWP (after controlling for economic conditions and other demographic characteristics). This is not the case for Hispanics, who continue to be more likely to be LWP at about the same rate. Respondents attending school are more likely to be LWP, but the effect for the 1997 cohort is roughly one-third the size of the effect for the 1979 cohort. This finding could result from changes between the two cohorts in the way the NLSY treats respondents living in temporary quarters, as explained in footnote 5, or it may indicate that recent youth are more likely to move away from home to attend college.

In contrast, economic conditions clearly have a larger effect on the chances of LWP for members of the 1997 cohort. In particular, higher housing costs increase the likelihood of LWP more for the 1997 cohort. Young adults in the 1979 (1997) cohort are 1.8 (4.3) percentage points more likely to be LWP when faced with a one-standard-deviation increase in housing costs (relative to income). Similarly, while the state-level unemployment rate has little effect on the likelihood that respondents from the 1979 cohort will be LWP, it has a positive and statistically different impact on 1997 cohort members living at home—a finding that suggests the business cycle played a more important role in the household-formation decisions of this more-recent cohort of young adults. This result is consistent with the fact that members of the 1997 cohort experienced a particularly poor employment situation during the Great Recession—a downturn that was more severe than the recession faced by members of the 1979 cohort in the early 1980s.<sup>22</sup>

The constant term in these separate regressions captures the share of respondents who are LWP in each cohort at age 23—the excluded age category in the analysis—after controlling for demographics and other factors, as well as local economic conditions. Our

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<sup>22</sup>Additionally, we tried specifications with state fixed effects for both the pooled and separate cohort analysis. While the results were similar for the pooled regressions, in the separate regressions there is not enough variation in our data within a state over time to identify the effect of differences in housing costs on LWP.

estimated constant term further captures the overall average share of respondents who are LWP in each cohort, since the age dummy variables are not statistically different in the two regressions—suggesting that the average share of respondents LWP within each cohort does not vary much by age, all else being equal. Given the coefficients on the constant terms, on average 33.1 percent of respondents in the 1979 cohort are LWP compared with 36.7 percent of respondents in the 1997 cohort—a difference of 3.6 percentage points. This gap between the cohorts in the share LWP is larger than the roughly 1.2 percentage point gap that remains in our pooled regressions after controlling for demographic and economic conditions.

The local economic conditions variables in columns (1) and (2) of Table 3 are standardized by cohort. Columns (4) and (5) in Table 3 report results where, instead of standardizing local economic conditions by cohort, we standardize them *across* the cohorts. This approach is equivalent to having a pooled regression where we interact all regressors with the 1997 cohort dummy. With this specification, the difference between the constant terms is just 1 percentage point and the constant terms themselves are not statistically different from one another.

To summarize, the differing economic conditions faced by young adults in the two NLSY cohorts can explain most, but not all, of the share of respondents LWP over time. If we allow economic conditions to affect the cohorts differently *and* to vary across cohorts, we can close the LWP gap in a statistical sense. However, this does not tell us why young individuals are more likely to be LWP when the economy is weak than they were in the past. Our hypothesis, which we explore more in the next section, is that attitudes towards LWP have changed over time.

## 4 Attitudes Toward LWP

We turn to the General Social Survey (GSS) for evidence of changing attitudes over time about co-habitation with parents. The GSS has been conducted by NORC (the National Opinion Research Center) at the University of Chicago since 1972, for the National Data Program for the Social Sciences.<sup>23</sup> For our attitude analysis we exploit several modules. The most relevant module inquires directly about individuals' attitudes regarding the transition to adulthood. Respondents are asked questions about what it means to become an adult (to be financially independent, to live without parents, to get married, etc.) by rating how important certain aspects are using a scale from 1 (extremely important) to 5 (not at all important). We create dummy variables, which take the value of 1 if a respondent thinks a certain aspect is extremely or quite important and 0 otherwise. Respondents are also asked about the typical age at which one should become financially independent, live without parents, or get married.

Unfortunately, this module is only available in 2002, and we must approximate the NLSY cohorts by splitting the sample by age. In particular, we split the sample into two groups—those respondents who are 18–34 years-old (in 2002) and those respondents who are 35–50 years old. While respondents in the NLSY79 cohort are 37–45 years old in 2002 and respondents in the NLSY97 cohort are 18–22 years old, the chosen age split gives us a similar number of observations in each GSS group, and each NLSY cohort is included in one of the two GSS groups. We acknowledge splitting by age is not ideal, because perceptions on adulthood may well change with one's experiences, but it is the only possible strategy, given the data. We analyze attitudes toward becoming an adult by calculating averages for the dummy variables by age group as well as the average belief of the age at which one should become financially independent, live without parents, or get

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<sup>23</sup>According to the GSS website, the survey is the “single best source for sociological and attitudinal trend data covering the United States” (see <http://gss.norc.org/About-The-GSS> for more detail).

married. Table 4 summarizes our findings. Overall, there are not big differences across the two age groups regarding what it takes to become an adult. If anything, members of the younger group desire to become an adult slightly earlier, and believe that becoming financially independent is very important for the transition to adulthood.

GSS respondents have been asked additional questions over the years that are also useful for analyzing whether shifting attitudes toward LWP can help explain the differential effect of economic conditions on LWP that we observe across the NLSY cohorts. While these GSS questions are asked almost yearly, we focus on Census years for brevity. For example, respondents are asked how they feel about “older people sharing a home with grown children.” We investigate shifting attitudes to sharing a home with adult children by constructing a dummy variable that takes the value of 1 if a respondent answers that “*it is a good idea*” to cohabit and 0 if the respondent states “*it is not a good idea*,” or “*it depends*.” Although it is unclear whether the question is asking about parents living with children or children living with parents, the results in Panel A of Table 5 show that there is a clear pattern of more favorable attitudes towards such cohabitation for both age groups in the GSS over time. We interpret this result as evidence that both children and their parents are becoming more accepting of such cohabitation arrangements.

Finally, in 1996, 2004, and 2014, GSS participants were asked about their level of attachment to the place where they grew up. Once again, we find an increasing level of attachment over time (for both younger and older individuals), which is consistent with the falling rates of interstate migration documented by Kaplan and Schulhofer-Wohl (2012)—see Panel B of Table 5. If young adults are more likely to stay in the same location as their parents over time, then they may feel less need to quickly move out of their parents’ home once they reach adulthood, and/or they may use their parents’ home during transition periods in their lives.

While it does not seem that young adults perceive adulthood differently from their

parents' generation, the results from the GSS are broadly consistent with LWP housing arrangements becoming more socially accepted over time, leading to less urgency for young adults to separate from their parents' household. In addition, less mobility across labor markets coupled with the changing attitudes may mean that young adults find it more practical to stay at home.

## 5 Conclusion

In this paper, we present evidence documenting the demographic and economic factors that influence the household-formation behavior of young adults. We find that the factors one expects would matter for whether or not young adults live with their parents—business-cycle conditions, housing costs, and the young adult's age—do indeed play a key role. Whether or not an individual is married or enrolled in school also affects the likelihood that he/she lives independently.

We further show that an individual's race noticeably impacts the likelihood of LWP—both within cohorts and especially over time. These results could be driven by cultural differences, proxied by race, in attitudes toward young adults who are LWP. For example, within certain communities, the choice of a young adult to live at home after finishing high school or college may be widely acceptable, whereas in other communities this preference may be viewed less favorably. Still, while acknowledging that the racial composition of the U.S. population appears to be important for accurately predicting household-formation rates going forward, population demographics are slow to change. Hence, it is unlikely that a shifting racial mix in the United States can account for the sizeable decline observed in aggregate household-formation rates starting around 2006.

The sheer magnitude of the employment losses during the Great Recession coupled with high housing costs can explain most of the decline in household formation, but even

after controlling for local economic conditions, we cannot fully account for the cohort-based difference in individuals' likelihood of living independently from their parents. To a certain degree, young adults seem inherently more likely to live with parents now than in the past, potentially due to shifting attitudes toward such co-habitation. We provide some evidence that this may be the case, using data from the GSS. Potential explanations for this shift in outlook include smaller family sizes and larger homes over time, which make it easier for young adults to cohabit comfortably with their parents.

## References

- Bleemer, Zachary, Meta Brown, Donghoon Lee, and Wilbert van der Klaauw. 2015. "Debt, Jobs, or Housing: What's Keeping Millennials at Home." Staff Report No. 700. New York, NY: Federal Reserve Bank of New York. Available at: [http://www.newyorkfed.org/research/staff\\_reports/sr700.pdf](http://www.newyorkfed.org/research/staff_reports/sr700.pdf).
- Detting, Lisa. 2016. "Effects of Entering Adulthood During a Recession." IZA World of Labor 2016:242. Available at: <http://wol.iza.org/articles/effects-of-entering-adulthood-during-recession-1.pdf>.
- Detting, Lisa, and Joanne Hsu. 2014. "Returning to the Nest: Debt and Parental Co-Residence Among Young Adults." Finance and Economics Discussion Series 2014-80. Washington, DC: Federal Reserve Board of Governors. Available at: <http://www.federalreserve.gov/econresdata/feds/2014/files/201480pap.pdf>.
- Dey, Judith G., and Charles R. Pierret. 2014. "Independence for Young Millennials: Moving Out and Boomeranging Back." *Monthly Labor Review* 1–10.
- Fry, Richard. 2015. "More Millennials Living With Family Despite Improved Job Market." Research report. Washington, DC: Pew Research Center. Available at: [http://www.pewsocialtrends.org/files/2015/07/2015-07-29\\_young-adult-living\\_FINAL.pdf](http://www.pewsocialtrends.org/files/2015/07/2015-07-29_young-adult-living_FINAL.pdf).
- Kaplan, Greg, and Sam Schulhofer-Wohl. 2012. "Interstate Migration Has Fallen Less Than You Think: Consequences Of Hot Deck Imputation In The Current Population Survey." *Demography* 49(3): 1061–1074.
- Paciorek, Andrew. 2016. "The Long and Short of Household Formation." *Real Estate Economics* 44(1): 7–40.

TABLE 1: Living with Parents. Pooled Cohorts

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1997 Cohort <sup>1</sup>	0.039*** (0.005)	0.037*** (0.005)	0.033*** (0.005)	0.014*** (0.005)	0.012** (0.005)	0.012** (0.005)	-0.009* (0.005)
Female		-0.078*** (0.004)	-0.078*** (0.004)	-0.078*** (0.004)	-0.078*** (0.004)	-0.082*** (0.004)	-0.042*** (0.004)
Enrolled in School		0.031*** (0.005)	0.030*** (0.005)	0.030*** (0.005)	0.030*** (0.005)	0.037*** (0.005)	0.008 (0.005)
Has Finished College		-0.024*** (0.005)	-0.024*** (0.005)	-0.026*** (0.005)	-0.026*** (0.005)	-0.001 (0.005)	-0.024*** (0.005)
Hispanic		0.083*** (0.006)	0.082*** (0.006)	0.077*** (0.006)	0.075*** (0.006)	0.060*** (0.007)	0.064*** (0.006)
Black		0.106*** (0.006)	0.105*** (0.006)	0.102*** (0.006)	0.101*** (0.006)	0.078*** (0.006)	0.032*** (0.006)
Northeast		0.068*** (0.007)	0.072*** (0.007)	0.042*** (0.008)	0.036*** (0.008)	0.037*** (0.008)	0.019*** (0.007)
South		0.008 (0.005)	0.010* (0.005)	0.006 (0.005)	0.004 (0.005)	0.002 (0.005)	0.006 (0.005)
West		-0.003 (0.006)	-0.005 (0.006)	-0.050*** (0.008)	-0.055*** (0.007)	-0.056*** (0.007)	-0.058*** (0.007)
Mom College		-0.005 (0.007)	-0.005 (0.007)	-0.007 (0.007)	-0.007 (0.007)	0.002 (0.007)	-0.014** (0.007)
Dad College		-0.032*** (0.006)	-0.031*** (0.006)	-0.032*** (0.006)	-0.031*** (0.006)	-0.020*** (0.006)	-0.027*** (0.006)
Urban		0.038*** (0.005)	0.037*** (0.005)	0.035*** (0.005)	0.034*** (0.005)	0.036*** (0.005)	0.021*** (0.005)
Rural/Urban Unknown		-0.013 (0.012)	-0.013 (0.012)	-0.009 (0.012)	-0.007 (0.012)	-0.004 (0.012)	-0.001 (0.012)
Unemployment Rate (state)			0.012*** (0.002)	0.014*** (0.002)	0.011*** (0.002)	0.010*** (0.002)	0.010*** (0.001)
Housing Costs (HP/Y, state)				0.028*** (0.003)	0.032*** (0.003)	0.032*** (0.003)	0.027*** (0.003)
Employed						-0.032*** (0.004)	-0.037*** (0.004)
Intelligence Score						-0.028*** (0.003)	-0.027*** (0.003)
Missing IQ score						0.010 (0.008)	0.014** (0.007)
Married							-0.208*** (0.004)
Has Kids							-0.107*** (0.004)
Constant	0.341*** (0.005)	0.298*** (0.007)	0.304*** (0.007)	0.331*** (0.008)	0.335*** (0.008)	0.360*** (0.009)	0.479*** (0.008)
Observations	149073	149073	149073	149073	149073	149073	149073
Adj. R-squared.	0.03	0.07	0.07	0.07	0.07	0.08	0.17

Notes: <sup>1</sup> Indicator variable that takes a value of 1 if the respondent is in the 1997 cohort and 0 if the respondent is in the 1979 cohort. A linear probability model is used in the estimations. The dependent variable, LWP, is 1 if the respondent reports a parent in the house he/she lives in during the interview. Additional controls include a full set of age dummies from age 24 to age 33, with age 23 as the base category. Housing costs are measured as the median home value in the state divided by a measure of income of the young. In column (4), income is median household income of households headed by 20–30-year-old individuals from the CPS. In columns (5)–(7), income is median individual income of individuals 20–30 from the CPS. Both unemployment rates and housing costs have been standardized to have a mean of zero and a standard deviation of one. Standard errors are clustered at the respondent level: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.



TABLE 2: Living with Parents. Pooled Cohorts. Respondents Living in Large CBSAs

		STATE CONTROLS	CBSA CONTROLS		
	(1)	(2)	(3)	(4)	(5)
1997 Cohort <sup>1</sup>	0.075*** (0.009)	0.036*** (0.010)	0.023** (0.011)	0.020* (0.011)	0.013 (0.010)
Female		-0.080*** (0.009)	-0.080*** (0.009)	-0.082*** (0.009)	-0.051*** (0.008)
Enrolled in School		0.031*** (0.010)	0.032*** (0.010)	0.035*** (0.010)	0.016 (0.010)
Has Finished College		-0.054*** (0.010)	-0.054*** (0.010)	-0.033*** (0.010)	-0.053*** (0.010)
Hispanic		0.078*** (0.012)	0.076*** (0.012)	0.061*** (0.012)	0.071*** (0.012)
Black		0.064*** (0.011)	0.063*** (0.011)	0.043*** (0.012)	0.015 (0.011)
Northeast		0.017 (0.014)	0.032** (0.013)	0.032** (0.013)	0.009 (0.012)
South		-0.016 (0.012)	-0.006 (0.012)	-0.007 (0.012)	-0.007 (0.012)
West		-0.094*** (0.014)	-0.063*** (0.013)	-0.063*** (0.013)	-0.070*** (0.012)
Mom College		-0.021 (0.013)	-0.020 (0.013)	-0.011 (0.013)	-0.024* (0.013)
Dad College		-0.026** (0.012)	-0.025** (0.012)	-0.015 (0.012)	-0.024** (0.012)
Unemployment Rate		0.033*** (0.004)	0.028*** (0.004)	0.026*** (0.004)	0.022*** (0.004)
Housing Costs		0.045*** (0.006)	0.043*** (0.005)	0.043*** (0.005)	0.037*** (0.005)
Employed				-0.037*** (0.008)	-0.041*** (0.008)
Intelligence Score				-0.025*** (0.006)	-0.024*** (0.006)
Missing IQ score				0.041*** (0.013)	0.039*** (0.013)
Married					-0.174*** (0.008)
Has Kids					-0.102*** (0.009)
Constant	0.348*** (0.011)	0.433*** (0.017)	0.436*** (0.017)	0.460*** (0.018)	0.534*** (0.018)
Observations	34910	34910	34910	34910	34910
Adj. R-squared.	0.05	0.09	0.09	0.09	0.15

Notes: <sup>1</sup> Indicator variable that takes a value of 1 if the respondent is in the 1997 cohort and 0 if the respondent is in the 1979 cohort. These results are calculated using a linear probability model. The dependent variable, LWP, is 1 if the respondent reports a parent in the house he/she lives in during the interview. Additional controls include a full set of age dummies from age 24 to age 33, with age 23 as the base category. Housing costs are measured as the ratio of median home values to median income of individuals 20–30 years old. The unemployment rate and housing costs are measured at the state level in column (2) and at the CBSA-level in columns (3)–(5). Both unemployment rates and housing costs have been standardized to have a mean of zero and a standard deviation of one. Standard errors are clustered at the respondent level: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

TABLE 3: Living with Parents, by Cohort

	SEPARATE REGRESSIONS I			SEPARATE REGRESSIONS II		
	NLSY79 (1)	NLSY97 (2)	Difference (3)	NLSY79 (4)	NLSY97 (5)	Difference (6)
Female	-0.083*** (0.005)	-0.070*** (0.007)		-0.083*** (0.005)	-0.070*** (0.007)	
Enrolled in School	0.050*** (0.008)	0.017** (0.007)	***	0.050*** (0.008)	0.017** (0.007)	**
Has Finished College	-0.023*** (0.007)	-0.034*** (0.008)		-0.023*** (0.007)	-0.034*** (0.008)	
Hispanic	0.070*** (0.008)	0.077*** (0.010)		0.070*** (0.008)	0.077*** (0.010)	
Black	0.126*** (0.007)	0.060*** (0.009)	***	0.126*** (0.007)	0.060*** (0.009)	***
Northeast	0.039*** (0.010)	0.034** (0.013)	*	0.039*** (0.010)	0.034** (0.013)	**
South	-0.003 (0.007)	0.020** (0.009)		-0.003 (0.007)	0.020** (0.009)	
West	-0.050*** (0.009)	-0.057*** (0.013)		-0.050*** (0.009)	-0.057*** (0.013)	
Mom College	0.003 (0.011)	-0.013 (0.010)		0.003 (0.011)	-0.013 (0.010)	
Dad College	-0.030*** (0.008)	-0.033*** (0.010)		-0.030*** (0.008)	-0.033*** (0.010)	
Urban	0.032*** (0.006)	0.040*** (0.008)		0.032*** (0.006)	0.040*** (0.008)	
Rural/Urban Unknown	-0.046*** (0.014)	0.024 (0.020)	***	-0.046*** (0.014)	0.024 (0.020)	***
Unemp. (state)	0.002 (0.002)	0.025*** (0.003)	***	0.003 (0.003)	0.021*** (0.003)	***
Housing Costs (HP/Y, state)	0.018*** (0.004)	0.043*** (0.005)	***	0.026*** (0.005)	0.035*** (0.004)	
Constant	0.331*** (0.010)	0.367*** (0.012)	**	0.338*** (0.011)	0.348*** (0.011)	
Observations	90939	58134		90939	58134	
Adj. R-squared.	0.07	0.06		0.07	0.06	

*Notes:* These results are calculated using a linear probability model. The dependent variable, LWP, is 1 if the respondent reports a parent in the house he/she lives in during the interview. Additional controls include a full set of age dummies from age 24 to age 33, with age 23 as the base category. Housing costs are measured as the median home value in the state divided by the median income of 20–30-year-old individuals according to the CPS. We cannot reject the null that the age dummies (not reported) are the same. Both unemployment rates and housing costs have been standardized to have a mean of zero and a standard deviation of one. In columns (1)–(2), these variables are standardized within a cohort, while in columns (4)–(5) they are standardized before separating the cohorts. Standard errors are clustered at the respondent level: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

TABLE 4: General Social Survey I: Transition to Adulthood

	Dummy			Typical Age		
	18–34	35–50	Difference	18–34	35–50	Difference
How important is it to be...						
Financially independent	0.86	0.80	**	20.09	21.31	***
Not living with parents	0.60	0.58		20.52	21.29	***
Married	0.30	0.28		26.09	26.00	
Observations	420	442		412	435	

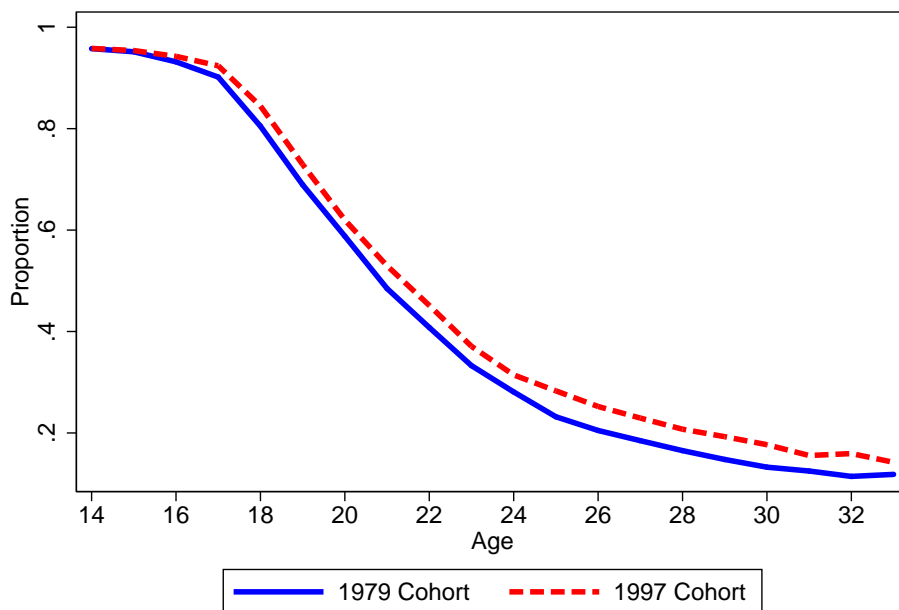
*Notes:* Questions are from the 2002 Topical Module on Adult Transitions. Respondents were asked about what it takes for a young person to become an adult. Dummy is for “it is quite or extremely important” vs. “not at all important, somewhat important, or don’t know.” Typical age is the mean of respondents’ idea of when (at what age) the above events should normally occur. Difference between the two group significant at \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

TABLE 5: General Social Survey II: Attitude Questions

Panel A: Parents Living with Grown Children	18–34		35–50	
1980	0.52		0.40	
1990	0.59	*	0.47	*
2000	0.63	***	0.58	***
2010	0.58		0.54	***
Observations	2187		2141	
Panel B: Attachment to Town or City	18–34		35–50	
1996	0.57		0.60	
2004	0.68	***	0.69	***
2014	0.61		0.69	***
Observations	1115		1171	

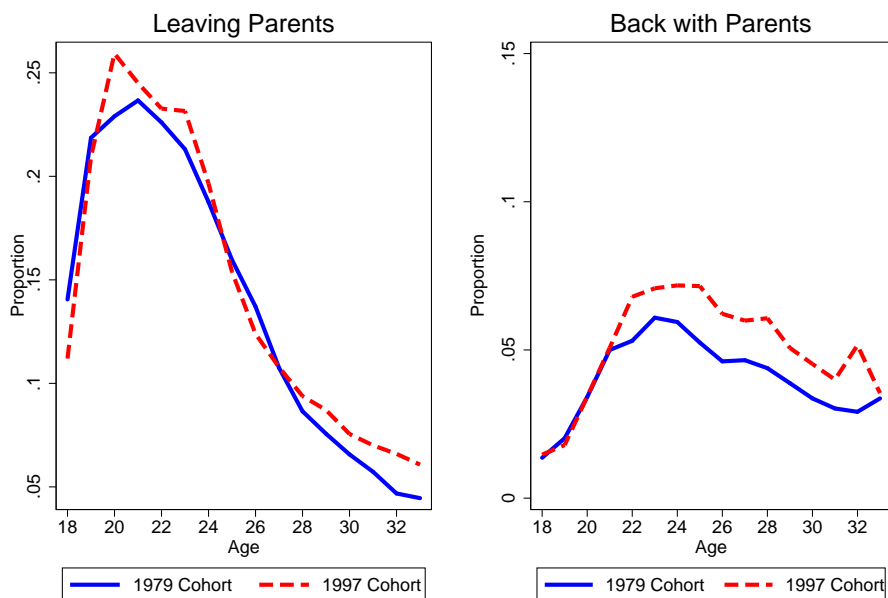
*Notes:* The question for Panel A comes from a multi-year survey on how respondents feel about older people sharing a home with grown children. (“*Question: As you know, many older people share a home with their grown children. Do you think this is generally a good idea or a bad idea?*”) Responses were coded into a dummy for “it is a good idea” vs. “not a good idea or it depends” to cohabit. The question is unclear about whether it is asking about parents living with children or children living with parents. The question for Panel B comes from the ISSP (International Social Survey Program) Module on National Identity. Responses are available for years 1996, 2004, and 2014. (“*Question: How close do you feel to your town or city?*”) Responses were coded into a dummy for “close or very close” vs. “not very close or not close at all.” The stars indicate statistical differences within an age group over time: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

FIGURE 1: Living with Parents, Across the 1979 and 1997 Cohorts



Source: Authors' calculations using NLSY data.

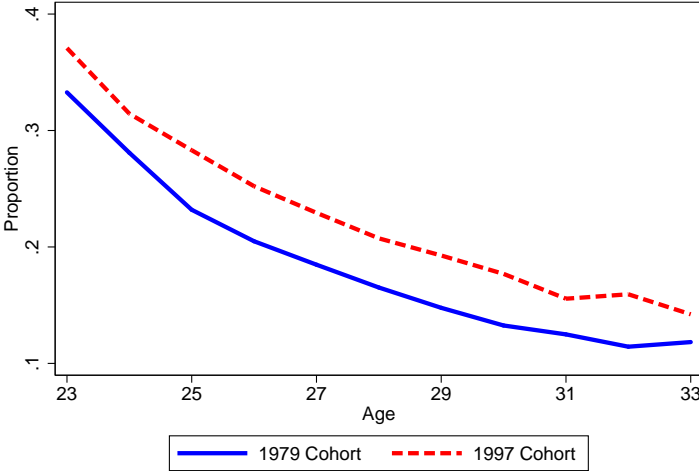
(a) A First Look



Source: Authors' calculations using NLSY data.

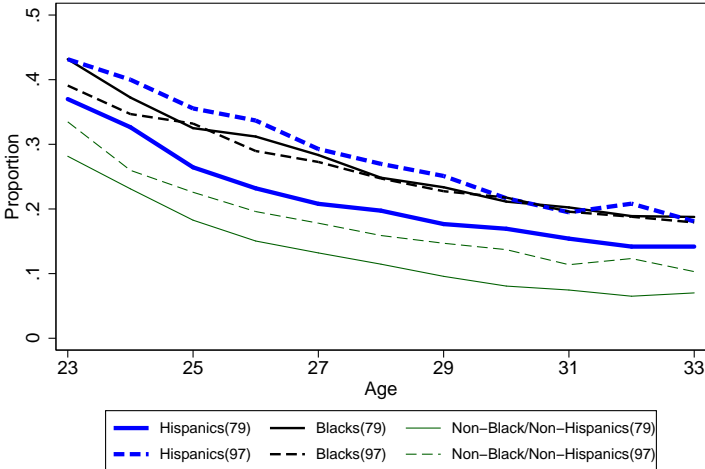
(b) Two-Year Transitions

FIGURE 2: Living with Parents, Individuals 23–33



Source: Authors' calculations using NLSY data.

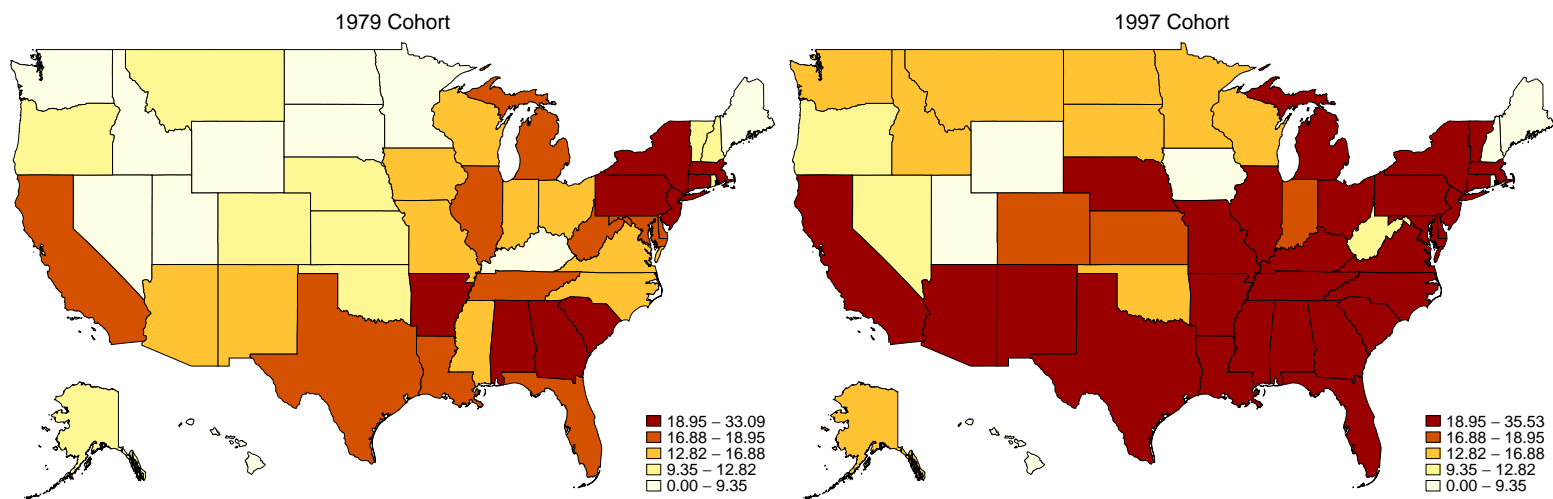
(a) All Respondents



Source: Authors' calculations using NLSY data.

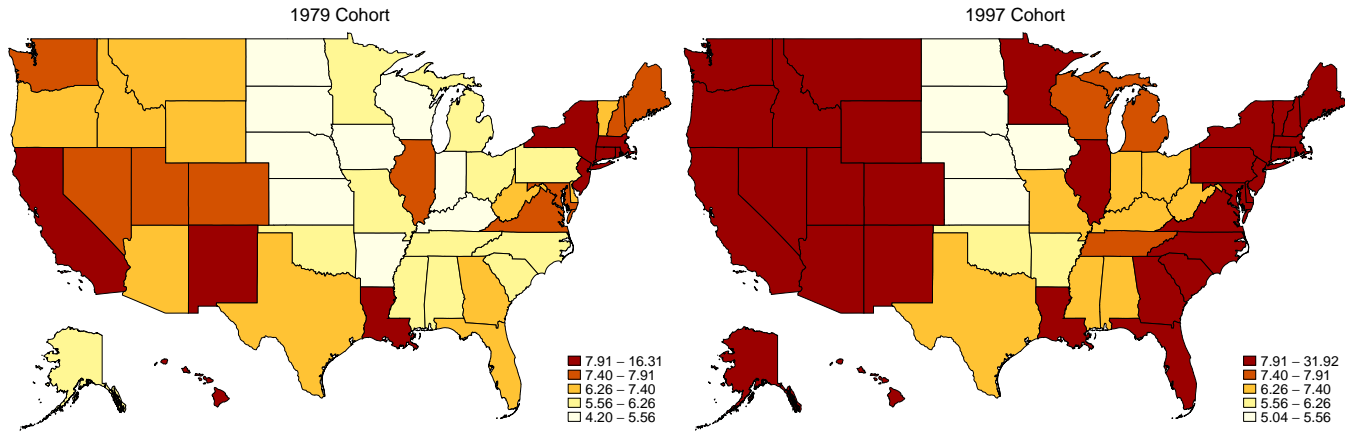
(b) By Race

FIGURE 3: Living with Parents by State



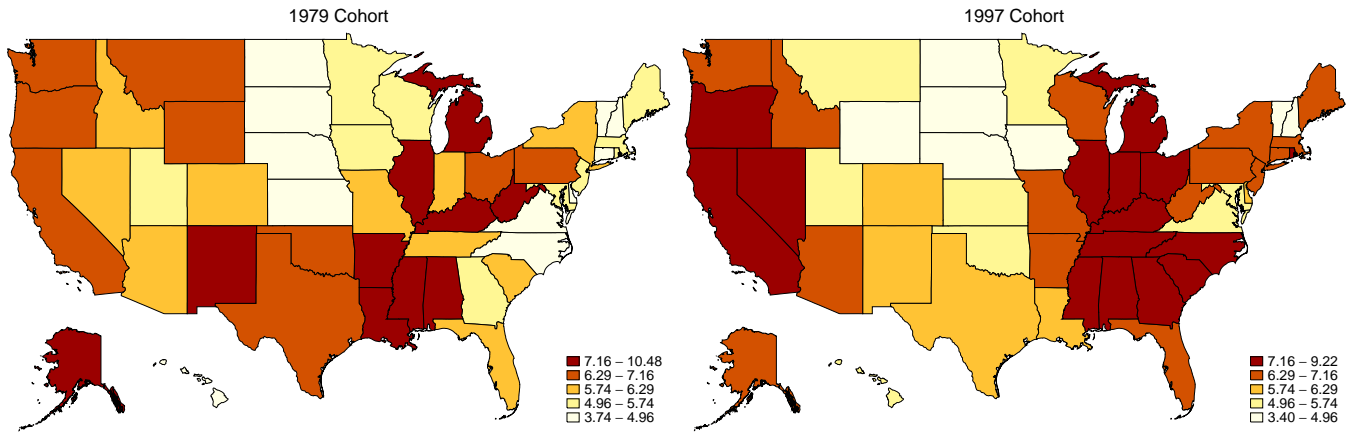
Source: Authors' calculations using NLSY data.  
Note: Average percentage of 23-33-year-old respondents living with parents.

FIGURE 4: Local Economic Conditions by State



Source: Authors' calculations using NLSY data.  
 Note: Average of state-level house value-to-income ratios for 23-33-year-old respondents.

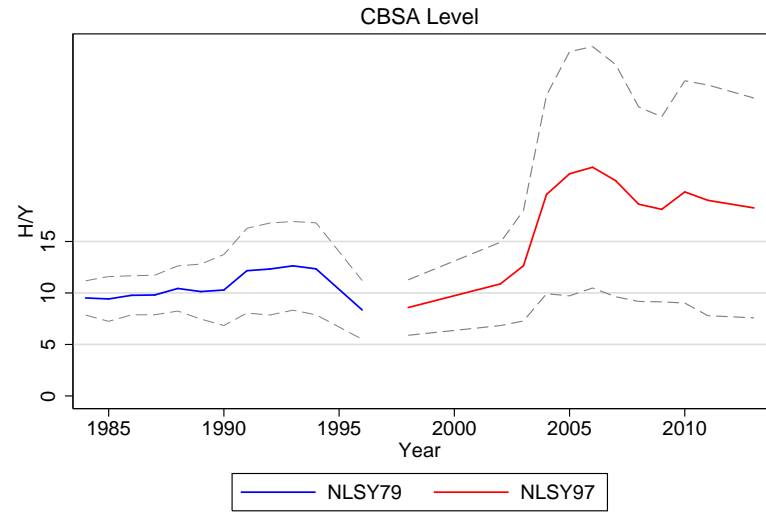
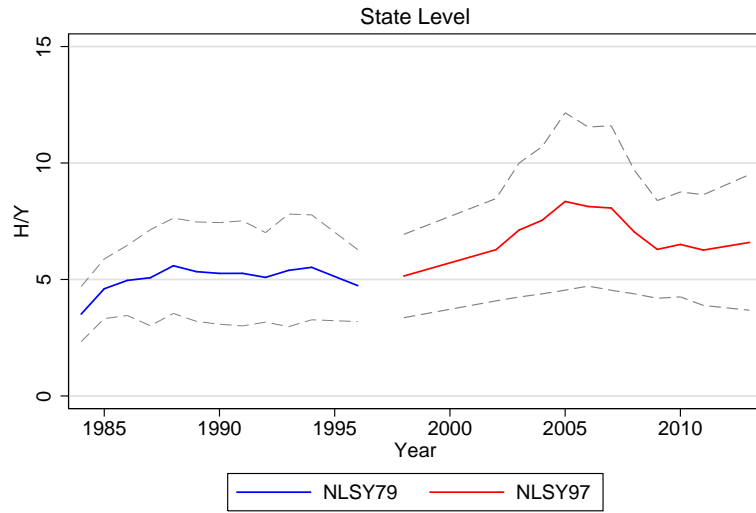
(a) Housing Costs



Source: Authors' calculations using NLSY data.  
 Note: Average of state-level unemployment rate for 23-33-year-old respondents.

(b) Unemployment Rates

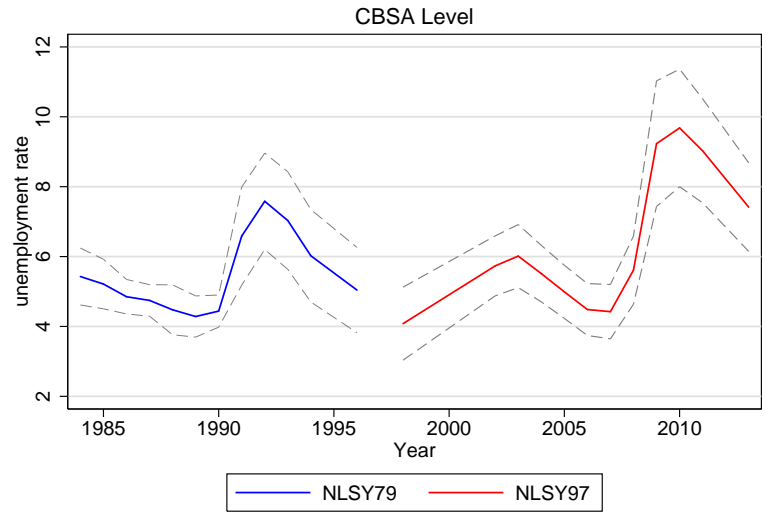
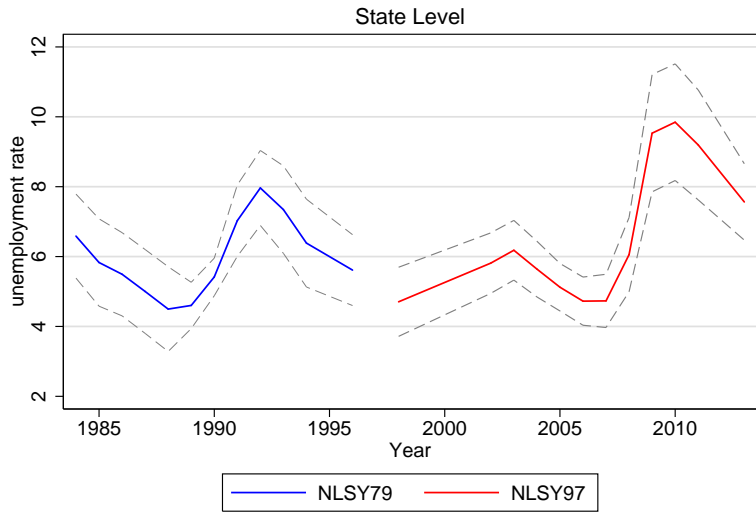
FIGURE 5: Local Economic Conditions Over Time



Note: average across individuals, and average plus or minus one standard deviation.

Note: average across individuals, and average plus or minus one standard deviation.

(a) Median Home Value/Income of 20–30 year-olds



Note: average across individuals, and average plus or minus one standard deviation.

Note: average across individuals, and average plus or minus one standard deviation.

(b) Unemployment Rate



# A Appendix: Additional Figures and Tables

TABLE A.1: Summary Statistics: NLSY79

	Count	Mean	SD	Min	Max
Living with Parents	90,939	0.16	0.36	0.00	1.00
Age of Respondent	90,939	28.26	2.96	23.00	33.00
Female	90,939	0.50	0.50	0.00	1.00
Married	90,939	0.53	0.50	0.00	1.00
Have Child(ren)	90,939	0.48	0.50	0.00	1.00
Enrolled in School	90,939	0.06	0.24	0.00	1.00
Has Finished College	90,939	0.18	0.38	0.00	1.00
Employed	90,939	0.79	0.40	0.00	1.00
Hispanic	90,939	0.06	0.24	0.00	1.00
Black	90,939	0.14	0.35	0.00	1.00
Non-Hispanic/Non-Black	90,939	0.80	0.40	0.00	1.00
Northeast	90,939	0.19	0.39	0.00	1.00
North Central	90,939	0.28	0.45	0.00	1.00
South	90,939	0.34	0.48	0.00	1.00
West	90,939	0.18	0.38	0.00	1.00
Mom College	90,939	0.10	0.29	0.00	1.00
Dad College	90,939	0.17	0.37	0.00	1.00
Rural	90,939	0.21	0.41	0.00	1.00
Unemployment, State	90,939	6.40	1.64	2.32	14.80
Housing Costs (HP/Y)	90,939	8.12	3.55	3.54	19.09
Region Unknown	90,939	0.00	0.00	0.00	0.00
Urban/Rural Unknown	90,939	0.02	0.12	0.00	1.00
Intelligence Test Score	87,248	49.55	29.05	0.00	100.00
Net Worth at Age 25, topcoded (2013 dollars)	60,787	34,863	97,609	-1,889,679	600,000
Net Worth at Age 30, topcoded (2013 dollars)	65,541	68,700	125,442	-1,814,603	600,000

*Notes:* Authors' calculations for the NLSY79 cohort using sample weights.

TABLE A.2: Summary Statistics: NLSY97

	Count	Mean	SD	Min	Max
Living with Parents	58,134	0.23	0.42	0.00	1.00
Age of Respondent	58,134	26.67	2.67	23.00	33.00
Female	58,134	0.49	0.50	0.00	1.00
Married	58,134	0.33	0.47	0.00	1.00
Have Child(ren)	58,134	0.44	0.50	0.00	1.00
Enrolled in School	58,134	0.15	0.36	0.00	1.00
Has Finished College	58,134	0.24	0.43	0.00	1.00
Employed	58,134	0.80	0.40	0.00	1.00
Hispanic	58,134	0.13	0.33	0.00	1.00
Black	58,134	0.17	0.37	0.00	1.00
Non-Hispanic/Non-Black	58,134	0.70	0.46	0.00	1.00
Northeast	58,134	0.16	0.37	0.00	1.00
North Central	58,134	0.25	0.43	0.00	1.00
South	58,134	0.37	0.48	0.00	1.00
West	58,134	0.22	0.41	0.00	1.00
Mom College	58,134	0.20	0.40	0.00	1.00
Dad College	58,134	0.22	0.41	0.00	1.00
Rural	58,134	0.27	0.44	0.00	1.00
Unemployment, State	58,134	6.93	2.32	2.61	13.78
Housing Costs (HP/Y)	58,134	11.85	6.45	4.17	35.63
Region Unknown	58,134	0.00	0.00	0.00	0.00
Mom College Unknown	58,134	0.00	0.00	0.00	0.00
Dad College Unknown	58,134	0.00	0.00	0.00	0.00
Urban/Rural Unknown	58,134	0.04	0.20	0.00	1.00
Intelligence Test Score	46,974	50.87	29.14	0.00	100.00
Net Worth at Age 25, topcoded (2013 dollars)	36,458	32,949	89,532	-1,079,566	600,000
Net Worth at Age 30, topcoded (2013 dollars)	27,698	50,979	112,245	-883,745	600,000

*Notes:* Authors' calculations for the NLSY97 cohort using sample weights.

TABLE A.3: Living with Parents. Probit Estimates. Pooled Cohorts

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1997 Cohort <sup>1</sup>	0.038*** (0.004)	0.037*** (0.004)	0.033*** (0.004)	0.015*** (0.005)	0.012** (0.005)	0.014*** (0.005)	-0.001 (0.005)
Female		-0.077*** (0.004)	-0.077*** (0.004)	-0.077*** (0.004)	-0.078*** (0.004)	-0.080*** (0.004)	-0.030*** (0.004)
Enrolled in School		0.030*** (0.005)	0.029*** (0.005)	0.029*** (0.005)	0.029*** (0.005)	0.037*** (0.005)	0.008* (0.004)
Has Finished College		-0.027*** (0.006)	-0.027*** (0.006)	-0.028*** (0.006)	-0.029*** (0.006)	-0.003 (0.006)	-0.029*** (0.006)
Hispanic		0.083*** (0.006)	0.082*** (0.006)	0.077*** (0.006)	0.075*** (0.006)	0.060*** (0.006)	0.068*** (0.006)
Black		0.107*** (0.006)	0.106*** (0.006)	0.102*** (0.006)	0.102*** (0.006)	0.077*** (0.006)	0.031*** (0.005)
Northeast		0.069*** (0.007)	0.075*** (0.007)	0.046*** (0.008)	0.040*** (0.008)	0.041*** (0.008)	0.021*** (0.007)
South		0.010* (0.006)	0.012** (0.006)	0.008 (0.006)	0.007 (0.006)	0.005 (0.006)	0.011** (0.005)
West		-0.002 (0.007)	-0.003 (0.007)	-0.043*** (0.008)	-0.047*** (0.008)	-0.048*** (0.008)	-0.048*** (0.007)
Mom College		-0.004 (0.008)	-0.003 (0.008)	-0.005 (0.008)	-0.005 (0.008)	0.005 (0.008)	-0.008 (0.007)
Dad College		-0.034*** (0.007)	-0.033*** (0.007)	-0.033*** (0.007)	-0.033*** (0.007)	-0.023*** (0.007)	-0.030*** (0.006)
Urban		0.038*** (0.005)	0.038*** (0.005)	0.035*** (0.005)	0.035*** (0.005)	0.037*** (0.005)	0.023*** (0.005)
Rural/Urban Unknown		-0.006 (0.012)	-0.007 (0.012)	-0.003 (0.012)	-0.002 (0.012)	0.001 (0.012)	0.007 (0.011)
Unemployment (state)			0.014*** (0.002)	0.016*** (0.002)	0.013*** (0.002)	0.012*** (0.002)	0.013*** (0.001)
Housing Costs (HP/Y, state)				0.025*** (0.003)	0.029*** (0.003)	0.029*** (0.003)	0.023*** (0.003)
Employed						-0.028*** (0.004)	-0.030*** (0.003)
Intelligence Score						-0.030*** (0.003)	-0.029*** (0.003)
Missing IQ score						0.010 (0.007)	0.013** (0.006)
Married							-0.242*** (0.004)
Has Kids							-0.105*** (0.004)
Observations	149073	149073	149073	149073	149073	149073	149073

Notes: <sup>1</sup>Indicator variable that takes a value of 1 if the respondent is in the 1997 cohort and 0 if the respondent is in the 1979 cohort. A linear probability model is used in the estimations. The dependent variable, LWP, is 1 if the respondent reports a parent in the house he/she lives in during the interview. Additional controls include a full set of age dummies from age 24 to age 33, with age 23 as the base category. Housing costs are measured as the median home value in the state divided by a measure of income of the young. In column (4), income is median household income of households headed by 20–30-year-old individuals from the CPS. In columns (5)–(7), income is median individual income of individuals 20–30 from the CPS. Standard errors are clustered at the respondent level: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.