

Geographic Mobility and Parental Coresidence among Young Adults

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This paper connects two empirical trends: (i) the decline in geographic mobility and responsiveness to labor demand shocks, even among young adults who have historically been the most mobile, and (ii) the increased share of young adults co-residing with parents. Using data on young adults aged 18 to 35 from the American Community Survey and the Panel Study of Income Dynamics, we examine three outcomes: parental coresidence, transitioning out from living with a parent, and “boomerangs” - returning to live with a parent after living elsewhere. Our results demonstrate the importance of the parental coresidence option in understanding the location decisions of young adults. In particular, we find evidence that boomerang decisions may be insensitive to the labor market conditions that come with returning to the parents’ home, hence boomerang moves are more likely to result in residing in a labor market with higher unemployment rates. This raises some concerns for the future labor market prospects of young adults, particularly Hispanic young adults aged 18 to 23 years old and black young adults of any age, whose boomerang moves showed the greatest likelihood of being towards weaker labor markets.

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1. Introduction

Geographic mobility is a crucial part of labor market adjustment and hence national economic growth – people move from depressed or low demand labor markets towards areas with greater opportunity where their labor is more productive (Blanchard and Katz, 1992, and many others). The geographic flexibility of the U.S. workforce has been seen as a key competitive advantage. For individuals, migration can buffer regional shocks and provide opportunities for economic advancement. But internal migration and its responsiveness to labor demand shocks in the U.S. have been declining. Cross-state migration has been falling even among young adults, historically the most mobile portion of the population (Molloy et al, 2017). This age group is particularly important in labor market adjustment, and such geographic mobility may be most critical for early career development. While there is no consensus on the drivers of the decline, research documents low and falling responsiveness to negative labor demand shocks (Bartik, 2018; Dao et al, 2017), with responsiveness particularly weak among low education workers (Notowidigdo, 2013).

At the same time, there is another strand of literature on young adult household formation and coresidence with parents. The delay of young adults forming their own households, and the increase in adult children returning to live with their parents (so-called ‘boomeranging’) have both contributed to the increased share of young adults co-residing with parents (Cooper and Luengo-Prado, 2018). The literature has several explanations for increasing parental coresidence: higher housing costs, worse labor markets, increasing amounts of student debt and increased social acceptance for coresidence (Cooper and Luengo-Prado, 2018 and Bleemer et al, 2017, among others). Notably, most of the change in living arrangements is concentrated at lower levels of education (Matsudaira, 2016). Models have emphasized the parental home as a form of insurance or

buffer against negative shocks (Kaplan, 2012). This literature has focused less (or not at all) on the extent to which co-residing with parents is linked to a specific location and labor market.

While both literatures have framed migration or coresidence as a form of insurance against labor market and housing market risk, to our knowledge there is no research that pulls these two literatures together. In this paper, we attempt to do this, to consider both independent and co-residing residential options for various migration and household formation decisions of young adults.

Using the American Community Survey (ACS) and the Panel Study of Income Dynamics (PSID), we provide descriptive data and OLS regressions on three residential outcomes for young adults: co-residing with their parents, transitioning out from living with a parent, and returning to live with a parent after living elsewhere. We connect the migration and coresidence literatures by recognizing co-residing as a starting point, and as an option for migration decisions – including whether a young adult has lived elsewhere previously – in models of coresidence and transitions out. We also recognize that this option is to a specific location and labor market, and incorporate the characteristics of that option in models of boomerang moves. This permits a better recognition of the interconnected margins of labor market and residential adjustments.

We estimate regression models of the likelihood of co-residing with parents. As have others, we find that higher unemployment and housing costs increase co-residing, particularly for those under 30 years old. We also find that young adults who have previously left their parents' home are less likely to co-reside in the current time period, including those who were living in an educational residence, though the effect for this group is smaller. Further, a state's unemployment rate differentially matters for 24-29 year olds who have lived elsewhere previously. Other research does not distinguish this group in models of coresidence or household formation.

We also estimate models of transitions out of parental coresidence and similarly find that those who transitioned-out previously are more likely to leave, but are also more sensitive to the state's unemployment rate. This implies that young adults who have returned to live with their parents are more likely to continue living with their parents if unemployment is higher in the labor market that comes with co-residing.

Using the ACS, we find that among young adults who move, a majority of boomerang moves are to areas¹ with higher rates of unemployment than those they left, while the majority of non-boomerang moves are to areas with lower unemployment. This suggests that moves to a parent's home are not sensitive to the labor market that comes along with the move. The share of boomerang moves to destinations with higher unemployment than where the young adult left is particularly high for blacks (of all ages) and Hispanics 18-23 years old, even after controlling for other individual characteristics.

We use PSID panel data to estimate descriptive models of the likelihood that a non-coresident young adult makes a boomerang move, controlling for a variety of individual and family characteristics. Most importantly, we incorporate information on both the origin and (potential) parent destination to further test for this 'lack of sensitivity'. We find that higher unemployment or housing costs in a young adult's state in time $t-1$ increases the likelihood of boomeranging by time t , but the labor market conditions of where they would land (their parent's market) generally do not. While these moves might appear insensitive to destination conditions in mobility models that ignore coresidence, this would mischaracterize the likely income gain net of housing expenses for youth living with their parents.

¹ For the ACS, the geography is the MIGPUMA, as described below.

2. The Impact of Local Labor and Housing Markets on Migration and Parental Coresidence

2.1. Migration

Economists have long argued that migration is the equilibrating force by which local labor markets adjust to economic shocks in the U.S. For example, Blanchard and Katz (1992) showed that interstate migration responds quickly to regional shocks as workers move to areas with stronger labor markets.² Standard economic theory also recognizes the pursuit of cheaper costs of living as an important motive for migration and mechanism for achieving spatial equilibrium (Rosen, 1979; Roback, 1982).

Yet recent research has shown that U.S. workers are in fact reluctant to move away from negatively shocked areas and that this unresponsiveness has worsened over time. Dao et al (2017), incorporate an instrumental variable for labor demand shocks (the industry-mix variable of Bartik, 1991) into the methodology of Blanchard and Katz, and find far lower migratory responses to labor demand conditions; instead, state-specific unemployment is the main response for the two years after a labor demand shock. They further find a decline in responsiveness since the early 1990s, entirely due to less net-migration out of states that experience adverse shocks.

Other researchers have also used instruments for labor demand shocks to examine their relationship to migration. Bartik (2018) uses 2000 to 2014 panel data from the U.S. Census Bureau, combined with local labor demand shocks from exposure to trade with China (negative shock) and hydraulic fracturing (positive shock) to investigate whether workers are arbitraging job

² This is in contrast to European countries where migration frictions are generally deemed to be larger. For example, see Eichengreen, (1993) and Beyer and Smets (2015).

opportunities. He finds substantial earnings differentials between similarly skilled workers that are exposed to the local shocks and those who are not, and his location choice model estimates imply that moving costs must be several times annual income in order to explain the incomplete arbitrage across locations, industries, and occupations. Yagan (2014) uses 2000 to 2011 geocoded tax return panel data to investigate the extent to which migration served as ‘insurance’ against local economic shocks for male workers. He finds that it largely did not during the Great Recession, and that this was due to unusually small employment gains for workers migrating from heavily-shocked areas to lightly-shocked areas, rather than to a decline in migration rates. In contrast, insurance was three times greater over the earlier 2001 recession, though the effect is entirely driven by above-average earners. The results imply large and growing spatial adjustment frictions in the U.S. labor market.³

Another strand of literature seeks to explain the persistent decline in U.S. internal migration rates since the 1980s; Molloy et al. (2011) provides a useful review. Some of the research in this area also finds a diminished role for labor markets. For example, Sasser (2010) uses tax return data to examine the role of labor market conditions, per capita incomes and housing affordability in explaining state-to-state migration from 1977 to 2006. She finds that the importance of per capita income and labor market conditions have fallen, while that of housing affordability has increased. Molloy et al (2017) provide evidence that the general secular reduction in job changing has caused the decline in migration. Kaplan and Schulhofer-Wohl (2017) argue that the decline is because occupation-specific wages have become more geographically similar, which reduces the incentive for migration.

³ Several European data sources allow researchers to identify individual job displacements and then track them geographically over time. The evidence on whether migration helps mitigate negative labor market shocks here is more mixed. For example, Huttunen et al. (2018), Fackler and Rippe (2017), Maczulskij et al. (2018), and Boman (2011).

The literature has also found that workers with lower levels of education are less responsive to labor demand shocks and less likely to make long-distance moves; for example, Wozniak (2010), Bound and Holzer (2000), Amior (2017) and Notowidigdo (2013).

Since housing costs are a substantial component of household budgets, high rents or high housing prices will moderate the incentive to move to an area with high local wages. As such, we would expect housing costs to also play a key role in spatial adjustment (Glaeser and Gottlieb, 2008). There is a large literature that investigates the role of housing costs on mobility and migration. For example, Plantinga et al (2013) show that individual-specific measures of predicted housing cost help to explain individual choice of metropolitan area in the 2000 Census. Studies that have considered more complicated interactions among housing price, housing tenure choice, migration and labor markets also generally find a significant role for housing market factors.⁴ In addition, a sizeable strand of research finds that negative housing equity reduces mobility.⁵

2.2. Parental Coresidence

There is a substantial literature on transitions into and out of parental coresidence for young adults. Such transitions necessarily involve a move, though not necessarily a long distance move that involves a change in labor market. Several papers provide a theoretical framework for thinking about household formation and labor market shocks; for example, Kaplan (2012) and Ermisch (1999). The basic idea is that the option to move in and out of the parental home serves as a valuable buffer against labor market shocks and high housing costs.

⁴ For example, Jeanty et al (2010), Head and Ellis (2012), and Zabel (2012).

⁵ For example, Bloze and Skak (2016), Bricker and Bucks (2016), Foote (2016), Andersson and Mayock (2014), Coulson and Grieco (2013), Modestino and Dennett (2013), Ferreira et al (2010), and Chan (2001).

The empirical papers in this literature generally find that the share of young adults living with their parents has increased substantially over time. For example, Matsudaira (2016), using Census data, finds pronounced increases in parental coresidence rates after 2000, particularly over the Great Recession years when coresidence rates were rising even among men and women in their 30s.

The literature also finds that high housing costs and adverse labor market conditions contribute to the increasing trend in coresidence (Newman et al, 2018; Paciorek, 2016; Choi and Painter, 2015; Haurin et al, 1993; and many others). Several papers using credit report data have found an important role for high debt levels, especially student loans, in explaining parental coresidence (Dettling and Hsu, 2018; Bleemer et al, 2017).

The majority of the research focuses on whether young adults are co-residing, or on household formation, but ignores boomerang moves. For example, Lee and Painter (2013) examine the relationship between economic conditions and the formation of potential households using the PSID 1975-2009. They find that recessions and increases in the state unemployment rate are important factors in the reduced rate of household formation. They do not investigate boomerang moves, and it is unclear whether their analysis sample includes former boomerangers.

Research that includes an analysis of boomeranging is more limited. Kaplan (2012) uses the National Longitudinal Survey of Youth (NLSY) and focuses on the years 1998 to 2002 when monthly coresidence measures were available to highlight the high frequency with which parental coresidence spells occur. In a sample of males aged 17-22 who are never observed in postsecondary education, the military or jail, he finds that boomerang moves are very common: 58% of youth who had lived away from home at some point had moved back home for one month or more. The median duration of a boomerang spell for this group is 16 months, with 22% ending within 6 months, while 34% are 2 years or more.

Cooper and Luengo-Prado (2018) compare the NLSY 1979 cohort who were aged 25 in the mid-1980s with the NLSY 1997 cohort who were aged 25 in the late 2000s. They find that the increase in parental coresidence (including both delayed household formation and boomerangs) can be explained by differences in demographics, housing costs and economics conditions, and that in particular, young adults have become more sensitive to economic conditions in their decisions to co-reside. Notably, their controls for economic conditions are based on the location of the young adult and not on that of the parents, unless they co-reside.

2.3. Jointly Considering Migration and Parental Coresidence

There is virtually no research that ties it all together. By doing so, we make three important contributions. First, in terms of migration and geographic mobility, we recognize that the options available to a young adult differ depending on whether they are already co-residing with a parent. To the extent that living with a parent entails low or even zero housing costs, those who are co-resident may be more shielded from the financial consequences of negative labor market shocks; they may also be less responsive to labor market conditions since a move to a stronger market requires forfeiting low cost housing. On the other hand, young adults not co-residing may have the option of co-residing in response to a negative labor market shock – making an adjustment on the residential margin rather than the labor market margin (for those living near their parents), or to a different labor market where the characteristics of the destination labor market may be less of a consideration (for those living further away from their parents). The migration literature has generally ignored coresidence both as a starting condition and as a specific migration option.

Second, in terms of co-residing, we recognize two distinct paths to co-residing that are combined in the literature: individuals who have never lived independently from their parents, and those that previously moved out but have chosen to return. Factors driving those pathways to co-

residing could very well differ, as could drivers of future household formation. Research on household formation frequently fails to distinguish between young adults who have ‘lingered’ and those that have boomeranged; transitions out of the parent’s home but within the same labor market are also combined with transitions to new labor markets.

Third, the limited research on boomerang moves does not consider the young adult’s origin relative to the parental location among those who boomerang, nor the parental option for those that do not. Our contribution is to consider the specificity of the parental co-residing option.

Considering both independent migration options and the option to live with parents may shed new light on migration and coresidence decisions, as well as their implications for economic advancement and inequality. First, the lack of responsiveness to bad labor market shocks could be due to people choosing to adjust on a different margin (residential), and choosing to live with parents to lower expenses, rather than move to another labor market. The increasing value of the parental coresidence option (due to rising housing costs) may explain a piece of the decreasing responsiveness to labor shocks via migration. Once in coresidence, there may be stickiness or inertia that further dampens the motivation to move as young adults get used to low-cost housing and other aspects of coresidence (whether positive or negative).

Second, the literature suggests that the lack of responsiveness is especially pronounced among the less educated. The option to co-reside with a parent may be even more valuable for this group, with housing costs relative to income rising disproportionately more for them (Chan and Jush, 2017). Residing in the same or nearby labor market when young adults initially form their own households may increase the likelihood that they exercise the option to co-reside with a parent. To the extent that the less-educated more frequently locate near their parents when forming households, they may be more likely to ‘boomerang’ in reaction to negative shocks, adding to their stickiness.

Third, we show that even when people move, the moves are not necessarily towards better locations in terms of labor market condition. However, if someone is moving in with their parents, the location could be ‘better’ in terms of the individual’s post-housing-expenses income, even if the parents are not located in a better labor market.

3. Data and Measures

3.1. Data Sources

We employ two data sets, each with different strengths. We first use the annual American Community Survey (ACS), 2006-2016, to analyze migration and coresidence trends.⁶ The large nationally representative sample size allows us to calculate descriptive statistics by characteristics such as age, race and ethnicity, gender and location. Importantly, we can identify prior location if an individual moved since the previous year, and we have information on household composition that allows us to identify parental coresidence and to identify whether a move is into a parents’ home. A major drawback of the ACS is that it consists of repeated cross-sections. We cannot document any transitions out of parental coresidence, nor can we document the incidence of boomerang moves over the entire course of young adulthood. Further, the ACS does not provide a linkage between parents and children unless they co-reside, and so we cannot consider the location of potential boomerang moves that do not actually occur; that is, the boomerang choice set is missing unless a boomerang move is made.

⁶ The Decennial Census can also be used to investigate parental co-residence, however, the available measures of mobility (5-year rates) are not comparable to the ACS (1-year rates).

The Panel Study of Income Dynamics (PSID) is a panel dataset that provides linkages between parent and children, as well as state identifiers for both. The panel structure allows us to overcome some of the drawbacks of the ACS, however, the sample size is far smaller and the interviews occur only every two years during our sample time frame, meaning that we are likely to miss some coresidence spells that start and end between consecutive interviews.⁷

Although the PSID began in 1968, there was a major sample change in 1997 when the original core sample of families was reduced and a refresher sample of post-1968 immigrant families was added. We therefore focus on the years 1997 and after when the interviews become biennial. Further, we restrict our analysis to individuals who were members of the 1997 sample families. Anyone who enters the PSID at a later date (by joining an existing family via marriage, for example) is not part of our analysis.⁸ Our analysis sample consists of 9,168 young adults who were both in the 1997 sample and aged 18 to 35 years at some point from 1997 to 2015. For 92.7% of them, we have information on at least one parent in at least one wave of the survey.

For both the ACS and the PSID, we divide young adults into three age groups: 18 to 23, 24 to 29, and 30 to 35. The youngest group (aged 18 to 23) consists of youth just finishing high school and beginning to leave their parents' home. Many of them may be in higher education and living in an educational institution. The middle group (aged 24 to 29) is more likely to have already left their childhood home, and unlikely to still be in college.⁹ The oldest group (30 to 35) is most likely to have left their childhood home and established their own households.

⁷ As noted above, Kagan (2012) reports that in the NLSY (1998 to 2002), 22% of boomerang spells among males aged 17 to 22 who never went to college, end within the first 6 months.

⁸ The PSID does not attempt to follow individuals who are not members of the 1997 sample families and so we cannot observe these non-sample individuals once they move out of the sample family unit. Therefore, they are not a good source of information on mobility and co-residence transitions.

⁹ In the 2016 ACS, fewer than 5% of 24 year olds without a college degree were still in school.

3.2. Measures of Parental Coresidence and Mobility

In both datasets we define parental coresidence as living with a parent (biological-, adoptive- or step-) or the parent of a partner or spouse.¹⁰ Individuals living in an institution, such as a college dormitory, are not counted as co-resident with a parent, even if they would consider a parent's home to be their permanent address. This is in contrast to the household formation literature which is focused on explaining the transition to economic independence. Our focus on labor mobility instead emphasizes the experience of living away and being exposed to other labor markets.

The ACS records whether each individual lived in the same home as one year ago and the MIGPUMA of residence one year ago.¹¹ MIGPUMAs are geographic areas defined by the Census Bureau that consist of two or more PUMAs (Public Use Microdata Areas of 100,000+ residents) and there are just over a thousand MIGPUMAs in the nation.¹² In combination with an individual's current location, we are then able to construct one year mobility measures and comparisons of origin and destination (at the MIGPUMA level) for movers.

As noted above, we cannot identify transitions out of parental coresidence in the ACS, but we can identify boomerang moves. Among young adults that co-reside with at least one parent (as defined above) and who moved in during the past year, we define the move as a boomerang if no parent also moved in during the past year from the same origin MIGPUMA as the young adult. Our

¹⁰ In the ACS, parents-in-law can only be identified if they are the household head. This may lead to undercounts of parental co-residence as we have defined it. The ACS variables used to construct our measure of co-residence are: MOMLOC (mother's location in the household), POPLOC (father's location in the household) and RELATE (relationship to household head).

¹¹ These measures will miss instances where the individual moved away but then moved back into the same home all within the past year. ACS variables used: MIGRATE1, MIGPUMA1, MIGPLAC1.

¹² Specifically, there were 1,024 MIGPUMAs between 2000 and 2011, and 1,005 MIGPUMAs from 2012 to the present.

calculation potentially undercounts boomerang cases where the parent and child move from separate homes within the same origin MIGPUMA into another home together.

In the PSID, we make use of the WHETHER MOVED variable that is asked of all individuals to identify mobility. There was a change in wording of this survey question beginning with the 2003 interview, which effectively widened the mobility time frame from roughly two years to a little more than two years.¹³ State identifiers allow us to compare the characteristics of origin and destination states.

Transitions out of coresidence in the PSID occur when a young adult is co-resident in one wave and then not co-resident with any parent in the next wave. Similarly, boomerang moves occur when a young adult is not co-resident in one wave and then is co-resident with any parent in the next. Because of the PSID family linkages, we are able to identify the specific states where non-co-resident young adults could potentially boomerang to. This is an important piece of information that is not available in the ACS.

4. Empirical Analysis using the American Community Survey, 2006-2016

4.1. Migration in the ACS

We begin by first confirming the general trends in mobility that have been documented in the literature. Exhibit 1 presents annual mobility rates for our three groups of young adults: 18-23, 24-29 and 30-35 year olds. Panel A includes all moves, and shows continuous declines in mobility

¹³ In 2001 and before, the question asks whether there has been a move since the last interview (which would have been about 2 years ago), or the spring of the previous year if there was no prior interview. In 2003 and after, the question asks whether there has been a move since the January of two years ago.

for all groups, though the rates and declines are smallest for the oldest group. While mobility has been declining, it is worth noting that even with this decline, more than a quarter of adults less than 30 years old in 2016 had moved in the past year. Panel B presents long-distance moves (interstate). Here, mobility rates are declining over the first half of the period, but appear to begin stabilizing or even increasing since 2010 for those aged 24 and older.

[Exhibit 1 here]

4.2. Parental Coresidence in the ACS

Exhibit 2 documents trends in the share of young adults co-residing with at least one parent, since 2006. Rates of parental coresidence have clearly increased over time for all age groups, which is consistent with the literature (for example, Matsudaira, 2016). While co-residing is most common for 18-23 year olds, the increase in co-residing was largest for 24-29 year olds, who experienced nearly a 10 percentage point increase from 2006 to 2016.¹⁴

[Exhibit 2 here]

Exhibit 3 provides more detail on co-resident rates and trends. Results are generally consistent with the literature. Men are more likely to co-reside with parents, though the gap is smaller at older ages. By race and ethnicity, whites have the lowest rates of co-residing. Hispanics had the largest growth in coresidence rates by far over the decade; growth was much smaller for whites and blacks. The native-born tend to have higher rates, which may reflect parents of

¹⁴ Specifically, 18-23 year olds experienced a 4.7 percentage-point increase, 24-29 year olds a 9.2 percentage point increase, and 30-35 year olds, a 6.0 percentage-point increase.

immigrants still living abroad. For all age groups, college graduates have the lowest rates of co-residing, with higher rates for those with some college, and higher rates still for those with only a high school degree. For 18-23 year olds, those with less than a high school degree have the highest rates of co-residing, while rates for this group are slightly lower than those with a high school degree for the older two groups. In terms of marital status and presence of children: for all age groups, singles with no children have the highest rate, then singles with children, followed by those who are married without children. Married young adults with children have the lowest co-residing rate. We also found some differences across census divisions (not presented in table), with Middle Atlantic (NY, NJ, PA) and Pacific (WA, OR, CA, HI, AK) states having the highest rates for all age groups; states in the West-north-central division (ND, SD, MN, NE, IA, KS, MO) have the lowest.

[Exhibit 3 here]

There are also important differences by locational characteristics. The bottom of the table shows coresidence rates by relative MIGPUMA characteristics. In terms of housing cost, coresidence is higher for all age groups in MIGPUMAs where the median rent or median home value is above the national median (compared to MIGPUMAs with median rent or median home value below the national median rent).¹⁵ In terms of labor markets, coresidence is higher in MIGPUMAs where the overall and age-specific unemployment rates are above the national average (compared to MIGPUMAs with below national average unemployment rates).¹⁶

¹⁵ Specifically, median rents for a two-bedroom unit.

¹⁶ Age-specific unemployment rates are calculated for each of our age-groupings, using the ACS. These more targeted measures of local labor markets may be more relevant for location choices.

To better control for the collection of factors related to co-residence and provide partial correlations, we estimate descriptive OLS regressions in which the dependent variable indicates whether the young adult is co-residing with a parent, controlling for an array of individual-level characteristics as well as the housing cost and unemployment rate of the MIGPUMA. We pool ACS data from 2006 to 2016, running separate models for 18-23, 24-29, and 30-35 year olds, and include year fixed effects. Results are presented in Exhibit 4; descriptive statistics for all variables are in the data appendix.

[Exhibit 4 here]

Model 1 for each age group presents the basic regression. Focusing on demographic controls first, most results are consistent with patterns in Exhibit 3 and the literature. Being married, having children, and having some college or a bachelor's degree are all negatively associated with parental co-residing for all age groups, while being unemployed or Hispanic is positively associated with co-residing. Some correlations differ by age-group, however. Coefficients for being black or in school are negative and significant for 18-23 year olds, but positive and significant for the two older groups; being male is positively associated with co-residing for 18-23 year olds, but negatively associated for 30-35 year olds. These differences by age group were not apparent in Exhibit 3, and suggest benefits of stratifying the data by age group, particularly for 18-23 year olds who may still be in school.

The next two rows of the table consider MIGPUMA housing cost and (age-specific) unemployment rates. In model 1, after controlling for a variety of individual-level characteristics,

co-residing with parents is higher for those living in MIGPUMAs with higher median house value and with higher unemployment rates.¹⁷ The increased likelihoods are larger for younger groups.

The next two columns include interaction terms to test for differences in the association between unemployment and co-residing, by education level (model 2) and by race and ethnicity (model 3). In terms of education, local unemployment increases the likelihood of co-residing more for those with greater education, with the largest coefficients on the interaction term for those with a college degree for those in the two older groups. In terms of race and ethnicity, unemployment interaction coefficients are generally lowest for whites. These results suggest there may be differential sensitivity to labor market conditions across demographic groups, and that these differences could drive some of the observed differences in co-residence rates by groups.

4.2. Boomerang Moves in the ACS

Next, we turn to one potential source of increased coresidence – boomerang moves. As noted previously, we classify a move as a boomerang move when a young adult moves into a home in which at least one parent co-resides, and no parent also moved in during the past year from the same origin MIGPUMA as the young adult. Exhibit 5 presents boomerang rates, the share of all moves within the past year by young adults of that age group that are boomerangs. Boomerang rates are highest for the two younger groups, and increase slowly for each group over the decade. The increase is largest for 24-29 year olds, who have the highest boomerang rate for the bulk of this time period.¹⁸

¹⁷ Results are similar when using aggregate unemployment for all working age adults (rather than age specific), and for models including the national unemployment rate.

¹⁸ Of course, in order to boomerang, one must have first transitioned out of a parent's home. A preferred measure that cannot be calculated with the ACS is the boomerang rate among those eligible to make such a move.

[Exhibit 5 here]

Exhibit 6 compares the characteristics of those who make boomerang moves to all other movers, pooled across 2006 to 2016. For all age groups, those making boomerang moves are more likely to be male (slightly) and white, and less likely to be Hispanic. Of note, these race and ethnicity patterns differ from co-residing overall, which is *lower* among whites and *higher* among Hispanics, suggesting that there may be differences in the path to co-residing and value in distinguishing those pathways. Boomerangers are also less likely to be immigrant which, similar to their lower rates of co-residing with parents, may be driven by their parents not living in the U.S. Boomerangers are less likely to be married (with and without children) than other movers, and more likely to be single and childless. The only notable difference across age groups is for education. Among 18-23 year olds, boomerangers are more likely to have a college degree than other movers, while for older groups, they are less likely. As noted, in order to boomerang, one must first leave home, and Exhibit 3 documents that coresidence rates are lowest for 18-23 year olds with a college degree – meaning a larger share of them are ‘eligible’ to boomerang. Finally, a much greater share of boomerang moves are long distance, either across state lines or cross MIGPUMAs, though there are no real differences by locations across census divisions (not shown in table).

[Exhibit 6 here]

Exhibit 7 delves deeper into differences in characteristics between destination and origin locations for moves across labor markets. For each move in the 2006-2016 sample, we calculate the difference between the unemployment rate in the destination and origination MIGPUMA in the

previous year (i.e., prior to the move), specific to the age group we are considering.¹⁹ Exhibit 7 presents, for each age group, the average of those differences, as well as the share of moves that are towards higher unemployment.

[Exhibit 7 here]

Across all age groups, boomerang moves are to destinations with higher unemployment rates than origin (on average), while the opposite is true for non-boomerang moves. The differences are small, particularly for 30-35 year olds, but a smaller share of moves are to areas with worse labor markets (as measured by higher unemployment) when those moves are *not* to the home of a parent.

The remainder of Exhibit 7 presents similar analysis broken out by education level and by race and ethnicity. We find that differences in education between boomerangers and other movers do not drive the unemployment pattern. For those with a high school degree or higher, the majority of boomerang moves are to places with higher unemployment rates while non-boomerang moves are not.

In terms of race and ethnicity, here too patterns generally hold within each group, though there are noticeable differences across groups in terms of magnitude. In particular, there is nearly a 10 percentage point difference for 18-23 year old Hispanics and for black young adults in general, between the share of boomerang versus other moves that are to MIGPUMAs with higher unemployment rates. Among the many factors that could drive these unemployment patterns are potential differences across groups in the labor markets where their parents live and also any differential sensitivity (or lack of sensitivity) to the labor market conditions that come with the co-

¹⁹ Because MIGPUMA boundaries changed between 2011 and 2012, we do not have consistent geographic areas over which to calculate changes, so the 2012 data are dropped.

residing option. Alternatively, these differences across race and ethnicity could be driven by other characteristics that are correlated with race.

To better control for correlated factors in assessing overall patterns in unemployment rates for moves, we estimate descriptive OLS models of whether a move is a boomerang move, for all young adults who moved in the previous year. We control for a variety of individual characteristics as well as housing and labor markets, and include year fixed effects. We would expect that higher unemployment in a destination is less of a deterrent for boomerang moves, since such moves also provide young adults with low (or no) cost housing. The results in Exhibit 8 show that indeed, the likelihood of a move being a boomerang move increases with a destination MIGPUMA's unemployment rate, at least for young adults less than 30 years old, even after controlling for housing costs and a variety of demographic characteristics. Note, these regressions consider moves of all distances, including moves within MIGPUMAs in which the unemployment rate captures labor market conditions of both the origin and the destination.

[Exhibit 8]

While we expect the likelihood that a move is a boomerang move to increase with a destination's unemployment rate, the effect of high unemployment in the MIGPUMA of origin is theoretically ambiguous. To more cleanly distinguish labor market conditions in the destination, we estimate similar regressions but only for moves that cross MIGPUMAs. Results are presented in Exhibit 9; only our main coefficients of interest are displayed. Model 1 includes both the unemployment rate of the origin MIGPUMA and the difference in unemployment rates between the destination and origin MIGPUMA. Unemployment in the origin market is insignificant for the youngest and oldest groups, and is only marginally significant (at the 10% level) for 24-29 year olds.

The difference in unemployment between the destination and origin, however, is positive and significant for all three age groups.

[Exhibit 9]

To test for potential variation across groups in sensitivity to the difference in unemployment rate between the destination and origin, model 2 includes interaction terms between the unemployment rate differences and the young adult's education. The results vary across the age groups. For 18-23 years olds, higher relative unemployment in the destination increases the likelihood of a move being boomerang most for those with some college, while the likelihood actually decreases with unemployment for those with a college degree. For 24-29 year olds, relative unemployment increases the likelihood of a boomerang move the most for those with some college, and second most for those with a bachelor's degree. For those 30-35 years old, the interaction coefficient is only significantly positive for high school graduates. Model 3 displays race and ethnicity interactions, and finds that relative unemployment increases the likelihood that a move is boomerang the most for young adults who are black for the two older groups, and for those who are Hispanic for the youngest group. Thus, the patterns we found earlier in Exhibit 7 hold even after controlling for a variety of individual characteristics.

5. Empirical Analysis using the PSID 1997-2015

The data appendix provides key coresidence and mobility rates, and descriptive statistics for our 1997 sample of individuals aged 18-35 at some point during our time frame. We find that, in

general, coresidence rates by age group are very similar across the PSID and ACS, as are boomerang rates.

The longitudinal structure of the PSID allows us to measure the incidence of boomerang moves over a longer time horizon for each individual. For the 70% of young adults in our sample that we can observe from the age of 19 or earlier, we can measure a “lifetime” boomerang rate, that is, whether they had ever made a boomerang move by a particular age. Exhibit 10 shows this cumulative incidence of boomerang moves. While only 5.3% of those aged 18-23 had boomeranged, the rate was 18.1% among those aged 24-29, and among those aged 30-35, 24.0% had done so. As an alternative illustration, we restrict the sample to young adults for whom we observe a complete history between the ages of 19 to 29. The last row of Exhibit 10 shows that 23% of this group have made at least one boomerang move. These measures imply that while the annual boomerang numbers from the ACS may seem small in magnitude, the share of people that have ever boomeranged over the course of young adulthood is quite substantial.

[Exhibit 10 here]

5.1. Factors Associated with Parental Coresidence

To explore the factors associated with parental coresidence, we estimate descriptive OLS models, pooling all observations from 1997 to 2015 for which we can identify the young adult’s state of residence.²⁰ The results for our three age groups are shown in Exhibit 11. We should emphasize that these models are for the purposes of illustrating partial correlations and are not intended to be interpreted causally.

²⁰ We do not have state of residence for those currently residing in an educational institution, so they are not included in the sample.

[Exhibit 11 here]

All models include a set of demographic controls for the young adult. Given the coefficient results are qualitatively similar to Exhibit 4 and the literature, they are omitted from the table for brevity, as are a variety of controls for parent characteristics.²¹ Most notably, having married parents and their owning the home increases the likelihood of a young adult co-residing, particularly for the two younger groups, as does having at least one parent with a college degree. Higher parental income (average of the two most recent waves) and wealth generally decreases coresidence. We also include the ratio of total rooms to other, non-parental household members, as a proxy for space available in the home. Surprisingly, increased ‘space’ is negatively associated with the likelihood of co-residing, for all age groups. On the other hand, the likelihood of co-residing increases with the number of other household members, which may capture cultural norms of co-residing, or other aspects of a home environment that make co-residing there more attractive.

The first set of rows in the table includes a series of mutually exclusive indicator variables to capture employment status, lagged one period. The reference group is unemployed and looking for work. For the youngest group, the student effect is positive and the only one of these variables with a significant coefficient; for the two older groups we find a negative effect for both working and for student across all specifications.

²¹ All models discussed below also include dummy variables for gender, marital status, having children, having a foreign born parent, race and ethnicity, education attainment, being in the older half of the age range, having poor health, missing values for various control variables, and year fixed effects. When there is more than one parent in the data, educational attainment is for the most educated parent, and income and wealth is for the richest parent.

Labor and housing market conditions are displayed in the lower half of the table. Consistent with prior research, we find significant effects of labor and housing market conditions faced by the young adult in several models. In model 1, both the state's unemployment rate, and the state's median house value have a positive and significant effect on the likelihood of parental coresidence for those in the two younger groups.²² Only a state's unemployment rate has a significant and positive coefficient for 30-35 year olds (significant at 10%). We have estimated these models removing young adults whose parents are over age 70, disabled or in poor health, and our results still hold, giving us some confidence that these patterns are not being driven by young adults providing elder care.

In model 2, we add an indicator variable that captures whether the young adult had 'previously launched', that is, we observe them living away from their parents at some point within our sample time frame, prior to the current survey year. We also add an indicator for whether the individual was living in an educational institution in the prior period – note that this necessarily implies that the person had previously launched. We find that both variables have strong effects. Having previously lived away from a parent's home is negatively associated with parental coresidence for all age groups. But for those who were residing in an educational institution in the prior period, that negative effect is reduced - the coefficient on educational institution is positive but

²² State unemployment rates are from the Bureau of Labor Statistics. To more closely align unemployment rates with the age of the young adults in the PSID, we use the following age-specific unemployment rates available consistently since 1999: for the 18-23 year olds, we use the 20-24 year old rate; for the 24-29 group, age 25-34 rate; and for the 30-35 group, we use the 25-44 rate. We estimate each state's median house value by taking the median self-reported value for a 3-bedroom house (the median home size) from the 2000 Decennial Census and adjust the values for before and after 2000 using the state's house price index (HPI) from the Federal Housing Finance Agency (FHFA). The FHFA purchase-only HPIs are weighted repeat-sales indices based on information from mortgages on single-family properties that were purchased or securitized by Fannie Mae or Freddie Mac. Cooper and Luengo-Prado (2018) use a similar method.

smaller in magnitude than the coefficient on previously launched and significant for the two younger groups. The coefficient on the state's unemployment rate is cut in half and no longer significant for 18-23 year olds.

The final model for each age group examines whether co-residing young adults who have previously lived away differ in sensitivity to their state's labor market conditions from young adults who have never 'launched' by interacting their state's unemployment rate with those two indicator variables. For the youngest group, the coefficients on the two interacted terms are insignificant. For the two older groups, however, state unemployment significantly increases the coresidence likelihood of someone who has previously lived away from their parents (10% significance for 30-35 year olds). Note, this regression cannot distinguish whether this association is related to the decision to return to living with one's parents, or the decision to continue to co-reside (or both), but separate models of transitions-out and boomerang moves can.

We have also run models that interact the young adult's level of education and labor market characteristics and there is some evidence of differential sensitivity with respect to housing costs, particularly for those with some college. Higher housing costs tend to increase co-residing for this group. In models interacting unemployment with education levels, and then separately with race and ethnicity, there is no clear pattern across age groups. The coefficient on being Hispanic, the smallest subgroup in the sample, is very sensitive to the inclusion of the interaction term, giving us pause on interpreting those interactions.

Overall, our findings are consistent with what others have found. Unlike the earlier work, we have controlled for whether an individual had previously left the home and found that it is an important factor in explaining parental coresidence. We also find differences in the magnitude of that influence by whether someone left home to reside at an educational institution, and some

evidence that for those in their mid-twenties, local labor markets matter differentially to those who have already lived on their own, in the decision to co-reside.

5.2. Factors Associated with Transitions out of Parental Coresidence

We next turn to transitions out of parental coresidence. We only include young adults in these descriptive models if they are co-resident at time $t-1$. The binary dependent variable is set equal to one if the individual is not co-resident in t , zero otherwise, and all control variables are measured at time $t-1$.²³ Exhibit 12 shows the results for each of the age groups, but note that the youngest group has three times the sample size of the middle group, and almost eight times the sample size of the oldest group; transitions for the younger groups may be the most meaningful. The coefficients on the young adult demographic controls and the parent controls tell a similar story to the ones in Exhibit 4 and 11 and so we do not display them here.²⁴ Instead, we focus on the effects of unemployment and housing cost. As expected from the previous literature, both variables have a negative effect on the youngest group moving out of a parent's home. Eighteen to 23 year olds living in high unemployment states are less likely to leave home, as are those living in high housing cost areas. Transitioning out is also less likely for 30-34 year olds living in areas of higher unemployment.²⁵

[Exhibit 12 here]

²³ Transitions out to an institutional residence, such as a dormitory or military setting, are included in this sample.

²⁴ The one difference among demographic variables is for education. The only significant coefficient is for having a college degree, which is positive.

²⁵ Results hold or are stronger after removing young adults whose parents are over age 70, disabled or in poor health.

In the second model, we show that those who had previously launched, meaning that they must have left and then boomeranged back, are more likely to transition out. Having left before, they are more likely to leave again. In the final model, we interact previously launched with state unemployment. For 18-23 and 30-34 year olds (the two groups for whom unemployment was negative in model 2), the effect of unemployment is significantly more negative for who had previously launched. Those who previously launched but are now residing with their parents are less likely to leave if their parents live in a higher unemployment area; in other words, they are more likely to continue co-residing if they are in a higher unemployment area (consistent with Exhibit 11). This suggests that household formation models would benefit from distinguishing between those who have continuously co-resided with parents and those that previously left.

5.3. Factors Associated with Boomerang Moves

Descriptive models for boomerang moves are shown in Exhibit 13. Here, we only include young adults if they are not living with parents at time $t-1$ and for whom we know their state of residence.²⁶ The binary dependent variable is set equal to one if the individual is then co-resident in t , zero otherwise, and all control variables are again measured at time $t-1$. All models also include the demographic and parent controls described earlier.

[Exhibit 13 here]

²⁶ We do not have state of residence for those currently residing in an educational institution, so they are not included in the sample.

We start with unemployment and housing costs in the state of residence of the young adult at time $t-1$, in model 1. For those in the youngest group, the results show a positive effect of housing: 18 to 23 year olds living in a state with high housing costs are more likely to boomerang to their parents. For the two older groups, the coefficient on housing costs is insignificant, while state unemployment has a significant positive coefficient. As noted earlier, for young adults who reside in the same housing and labor market as their parent (here measured at the state level), these are also features of their potential boomerang destination, while they are not for young adults living further from their parents.

To more clearly distinguish origin from destination, in model 2, we add an indicator for living in the same state as any parent, and controls for the difference in unemployment rate and the difference in housing cost between the parent's state and the young adult's state.²⁷ The results show that 24-29 year olds living in the same state as (but not with) a parent in $t-1$ are generally more likely to boomerang, though the effect is not significant for other age groups. This is likely capturing the effect of proximity and ease with which a move can take place. Relative unemployment rates are not significantly associated with boomerang moves. The only relative measure with a significant coefficient is for relative housing costs for 18-23 year olds, and it is positive. There is no evidence across these groups that higher unemployment or housing costs in destinations are deterring boomerang moves. Our results imply that while the market conditions of where a young adult resides independently matter for boomerang decisions, the market conditions of where the young adult will *land* by virtue of that move mainly do not. Given that the boomerang option is limited and location-specific, this means that individuals adjusting to a labor market shock may not be

²⁷ We define the parent's location as the state of residence of the mother, but if she is missing in the data, we use the location of the father. When both biological and adoptive parents are present in the data, we use information for the adoptive parents.

moving to a stronger labor market (though they are presumably lowering their housing expenses). This also means that for those boomerang moves that are within a housing or labor market, reacting to market conditions by boomeranging would not be observed as an adjustment in models that focus on migration without taking parental coresidence into account.

6. Conclusion

Our results demonstrate the importance of the parental coresidence option in understanding the location decisions of young adults. In particular, we find evidence that those not co-residing with their parents may be insensitive to the labor markets that come with returning to their parents' home. In terms of moving out of a parent's residence, we find differential sensitivity to local unemployment among those who lived away from their parents previously, suggesting that those who boomerang to a softer labor market may co-reside longer. Finally, we also find that the share of boomerang moves to MIGPUMAs with higher unemployment rates was highest for black young adults (of all ages) and Hispanics aged 18-23. Unemployment rates increase the likelihood of co-residing with parents the least for whites.

If these patterns persist – in particular, if boomerang decisions remain insensitive to the labor market conditions that come with coresidence, what might this mean looking forward to 2050? While we cannot predict where the parents of today's children will live in the future, nor what those labor markets will look like, Exhibit 14 presents information on unemployment rates for the MIGPUMAS in which current (2016) 16 and 17 year olds live, broken out by race. These unemployment rates may be our best proxy for the co-residing options faced by the next set of young adults. The exhibit presents unemployment rates for 18-23 and 24-35 year olds, as well as the

share of 16 and 17 year olds living in MIGPUMAs with unemployment rates above and below the national average.

[Exhibit 14 here]

Results are similar regardless of which unemployment rate is used, though magnitudes are larger for 18-23 year old unemployment rates; the disparities by race and ethnicity are quite striking. Black and Hispanic 16 and 17 year olds live in MIGPUMAs with higher unemployment than whites and those of other race, with the majority living in MIGPUMAs with unemployment rates above the national average. The majority of white and other race 16 and 17 year olds, on the other hand, live in MIGPUMAs in which the unemployment rates are below the national average. If this is indicative of the labor market conditions each group would face if they decide to co-reside with their parents in the future, this pattern is potentially troubling.

Of course, even if these differences by race and ethnicity persist, their implications for labor market outcomes and disparities across groups remain unclear. The lower cost of housing and other benefits gained by co-residing with parents may outweigh any negative effects of softer labor markets. Indeed, there is work suggesting that living near to parents may provide some labor market benefits. Coate et al. (2017), for example, document faster post-job displacement earnings recovery among young adults living in the same census tract as their parents. These benefits are limited to young adults who have their own children, suggesting that child care provision by nearby grandparents is the likely mechanism. While that research does not consider co-residence, it does highlight that there may be other benefits to co-residing.

In terms of policy implications, without a better understanding of the drivers and relative costs and benefits, we would hesitate to speculate. But drawing on the literature that finds a role for

increased student debt in co-residing, the implications here seem clearer. To the extent that greater student debt induces young adults who would otherwise not choose to co-reside to do so, this may come with weaker nearby labor market prospects. This may be particularly true for black and Hispanic young adults, who appear more likely to boomerang to softer labor markets, and those who have incurred some of the costs of college without earning a degree – hence may not even experience any compensatory gains in their wages. These patterns may provide additional evidence of the need for policy reforms in the financing of higher education, particularly to the extent that higher education is presumed a path to decreasing economic and racial disparities.

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Data Appendix

Appendix table A1 provides key coresidence and mobility rates for our 1997 sample of individuals aged 18-35 at some point during our time frame, by age group. To provide some ability to benchmark the PSID with the ACS, we include rates for both data sets, though they are not strictly comparable in timing or, in some cases, in definition. The mobility rates in the PSID cover (at least) a two-year period, while the ACS rates are for the previous year. PSID mobility rates tend to be nearly twice the annual rates found in the ACS. By age group, both sources show 18-23 and 24-29 year olds to have very similar mobility rates, and those 30-35 noticeably lower. Coresidence rates by age group are very similar across the two data sets, as are boomerang rates. The share of young adults transitioning out of a parent's home cannot be calculated in the ACS. The PSID rate is calculated as the share of young adults living with at least one parent in the previous survey period who transition out by the next survey, two years later. We see that transition rates are lowest for those aged 30-35, likely reflecting selection.

[Table A1 here]

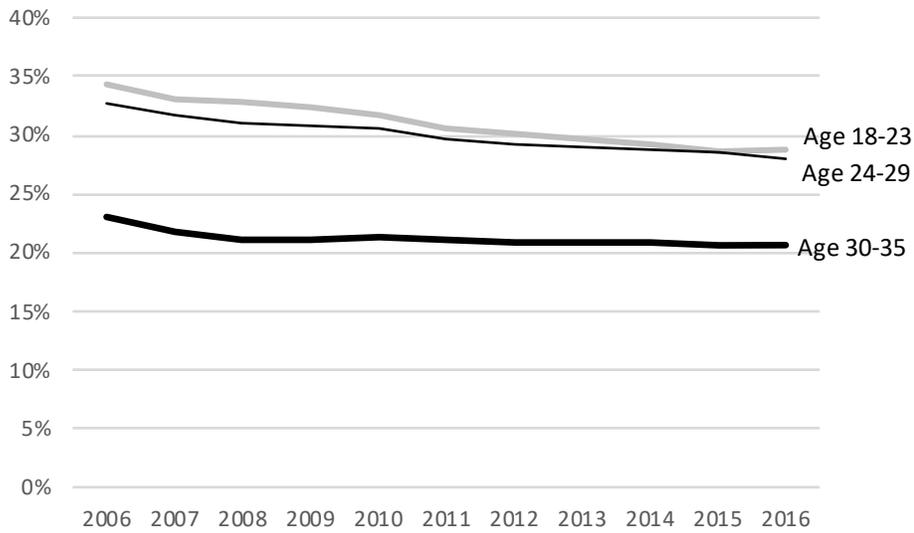
Appendix tables A2 and A3 shows descriptive statistics for the ACS and the PSID samples respectively.

[Table A2 here]

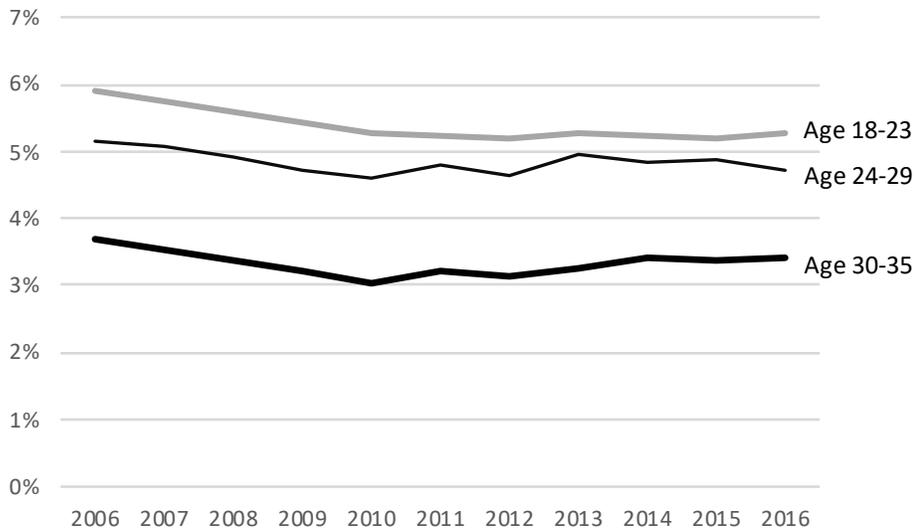
[Table A3 here]

Exhibit 1: One Year Mobility Rates, by Age Group

A: All Moves

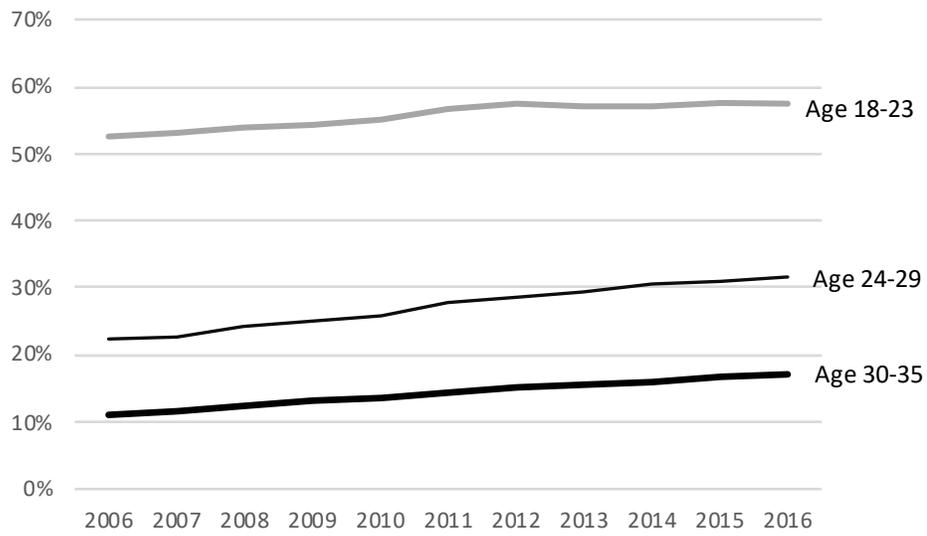


B: Cross-state Moves



Data source: American Community Survey, 2006-2016.

Exhibit 2: Parental Coresidence, by Age Group



Data source: American Community Survey, 2006-2016.

Exhibit 3: Parental Coresidence Rates by Age Group, Demographics, and Location Characteristics

	Age 18-23			Age 24-29			Age 30-35		
	2006	2016	Change	2006	2016	Change	2006	2016	Change
Demographics:									
Male	55.3%	59.9%	+4.5%	24.5%	34.2%	+9.7%	12.1%	18.6%	+6.5%
Female	49.6%	54.5%	+4.9%	20.1%	29.0%	+8.9%	10.0%	15.6%	+5.6%
White	50.9%	53.1%	+2.2%	20.2%	27.1%	+7.0%	9.3%	14.2%	+4.9%
Black	56.0%	58.2%	+2.2%	27.6%	36.3%	+8.8%	15.6%	22.3%	+6.7%
Hispanic	52.6%	69.4%	+16.8%	21.9%	39.7%	+17.8%	10.8%	19.9%	+9.1%
Native born	53.3%	57.5%	+4.2%	23.1%	32.1%	+9.0%	11.4%	17.5%	+6.1%
Immigrant	47.4%	55.0%	+7.6%	19.3%	29.2%	+9.9%	10.1%	15.7%	+5.6%
Less than high school	59.9%	73.8%	+13.9%	19.3%	31.0%	+11.7%	12.0%	18.2%	+6.2%
High school	55.0%	59.9%	+4.9%	25.3%	37.4%	+12.1%	14.4%	23.5%	+9.0%
Some college	47.5%	51.2%	+3.7%	23.4%	33.5%	+10.1%	10.7%	17.7%	+7.0%
College graduate	42.0%	46.4%	+4.4%	18.6%	24.4%	+5.8%	7.1%	11.0%	+3.9%
Single, no children	57.5%	59.8%	+2.2%	35.2%	41.6%	+6.3%	24.4%	31.3%	+6.9%
Single, with children	36.9%	44.0%	+7.1%	21.0%	27.8%	+6.8%	15.5%	20.5%	+5.0%
Married, no children	24.0%	37.3%	+13.3%	11.4%	17.8%	+6.4%	8.8%	13.9%	+5.1%
Married, with children	16.6%	22.0%	+5.4%	8.7%	12.0%	+3.3%	5.4%	7.8%	+2.4%
MIGPUMA characteristics:									
Median rent									
is above national median	60.0%	63.5%	+3.6%	27.5%	35.9%	+8.4%	13.1%	18.7%	+5.6%
is below national median	48.8%	54.2%	+5.4%	19.7%	29.2%	+9.5%	9.9%	16.2%	+6.4%
Median house value									
is above national median	57.9%	62.2%	+4.2%	25.8%	34.9%	+9.1%	12.4%	18.3%	+5.9%
is below national median	48.7%	53.1%	+4.5%	19.8%	28.4%	+8.7%	9.9%	15.9%	+6.0%
Unemployment rate									
is above national average	54.4%	59.1%	+4.7%	24.3%	34.6%	+10.2%	12.5%	19.1%	+6.6%
is below national average	50.8%	55.4%	+4.6%	20.5%	28.7%	+8.2%	9.7%	15.2%	+5.5%
Unemployment rate for age group									
is above national average	54.3%	59.8%	+5.5%	23.5%	35.5%	+12.0%	11.8%	19.1%	+7.4%
is below national average	51.2%	55.1%	+3.9%	21.4%	28.2%	+6.8%	10.5%	15.6%	+5.1%
Number of observations	216,247	238,360		200,359	223,675		213,141	226,913	

Data source: American Community Survey, 2006-2016. Sample is all individuals aged 18-35.

The percentages shown are coresidence rates: the share of young adults living with their parents.

Exhibit 4: Factors Associated with Parental Coresidence (ACS)

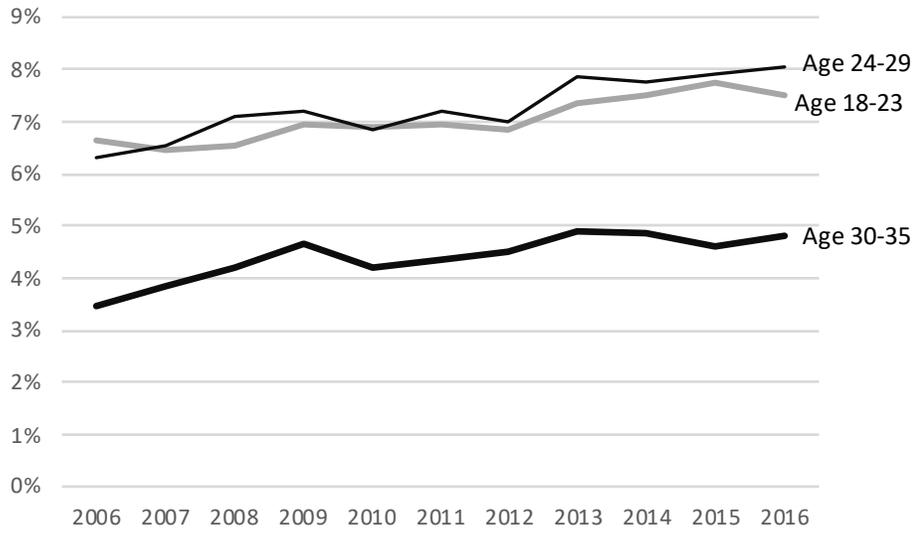
	Age 18-23			Age 24-29			Age 30-35		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Age	-0.0306** (0.0002)	-0.0305** (0.0002)	-0.0307** (0.0002)	-0.0193** (0.0002)	-0.0193** (0.0002)	-0.0193** (0.0002)	-0.0030** (0.0001)	-0.0030** (0.0001)	-0.0030** (0.0001)
Male	0.0200** (0.0006)	0.0201** (0.0006)	0.0200** (0.0006)	0.0008 (0.0006)	0.0010+ (0.0006)	0.0008 (0.0006)	-0.0038** (0.0005)	-0.0038** (0.0005)	-0.0038** (0.0005)
Married	-0.2422** (0.0012)	-0.2422** (0.0012)	-0.2418** (0.0012)	-0.1796** (0.0006)	-0.1795** (0.0006)	-0.1796** (0.0006)	-0.1274** (0.0006)	-0.1275** (0.0006)	-0.1274** (0.0006)
Has children	-0.1517** (0.0013)	-0.1521** (0.0013)	-0.1516** (0.0013)	-0.1033** (0.0007)	-0.1034** (0.0007)	-0.1033** (0.0007)	-0.0699** (0.0005)	-0.0699** (0.0005)	-0.0699** (0.0005)
Black	-0.0376** (0.0010)	-0.0366** (0.0010)	-0.0712** (0.0027)	0.0119** (0.0010)	0.0122** (0.0010)	0.0116** (0.0023)	0.0130** (0.0009)	0.0131** (0.0009)	0.0093** (0.0018)
Hispanic	0.1001** (0.0010)	0.0999** (0.0010)	0.0389** (0.0030)	0.0786** (0.0011)	0.0782** (0.0011)	0.0746** (0.0023)	0.0356** (0.0009)	0.0356** (0.0009)	0.0331** (0.0017)
Other race	0.0417** (0.0010)	0.0420** (0.0010)	-0.0081** (0.0026)	0.0822** (0.0010)	0.0822** (0.0010)	0.0720** (0.0021)	0.0606** (0.0008)	0.0606** (0.0008)	0.0616** (0.0016)
Immigrant	-0.0382** (0.0011)	-0.0381** (0.0011)	-0.0374** (0.0011)	-0.0383** (0.0010)	-0.0384** (0.0010)	-0.0382** (0.0010)	-0.0253** (0.0007)	-0.0252** (0.0007)	-0.0253** (0.0007)
Less than high school	0.0811** (0.0010)	0.1506** (0.0025)	0.0810** (0.0010)	-0.0806** (0.0012)	-0.0684** (0.0024)	-0.0807** (0.0012)	-0.0485** (0.0010)	-0.0448** (0.0019)	-0.0485** (0.0010)
Some college	-0.0744** (0.0008)	-0.1108** (0.0019)	-0.0745** (0.0008)	-0.0331** (0.0008)	-0.0490** (0.0017)	-0.0331** (0.0008)	-0.0371** (0.0006)	-0.0413** (0.0012)	-0.0371** (0.0006)
College graduate	-0.0595** (0.0015)	-0.0352** (0.0037)	-0.0594** (0.0015)	-0.1171** (0.0008)	-0.1566** (0.0016)	-0.1171** (0.0008)	-0.0854** (0.0006)	-0.0917** (0.0011)	-0.0854** (0.0006)
Unemployed	0.0724** (0.0011)	0.0730** (0.0011)	0.0721** (0.0011)	0.1480** (0.0013)	0.1486** (0.0013)	0.1479** (0.0013)	0.1115** (0.0013)	0.1117** (0.0013)	0.1115** (0.0013)
Not in labor force	-0.0847** (0.0007)	-0.0839** (0.0007)	-0.0848** (0.0007)	0.0042** (0.0008)	0.0049** (0.0008)	0.0042** (0.0008)	0.0136** (0.0006)	0.0138** (0.0006)	0.0135** (0.0006)
In school	-0.0053** (0.0008)	-0.0063** (0.0008)	-0.0053** (0.0008)	0.0255** (0.0008)	0.0252** (0.0008)	0.0255** (0.0008)	0.0131** (0.0008)	0.0130** (0.0008)	0.0131** (0.0008)
Median house value (\$M) in MIGPUMA	0.2350** (0.0028)	0.2342** (0.0028)	0.2353** (0.0028)	0.1081** (0.0023)	0.1102** (0.0023)	0.1085** (0.0023)	0.0468** (0.0018)	0.0471** (0.0018)	0.0467** (0.0018)
Unemployment rate in MIGPUMA	0.5067** (0.0053)			0.3343** (0.0070)			0.1124** (0.0064)		
Unemployment rate X Less than high school		0.0634** (0.0123)			0.0688** (0.0204)			0.0255 (0.0204)	
X High school		0.4848** (0.0072)			0.1951** (0.0108)			0.0766** (0.0108)	
X Some college		0.7100** (0.0089)			0.3622** (0.0125)			0.1335** (0.0114)	
X College graduate		0.3244** (0.0208)			0.6371** (0.0122)			0.1656** (0.0094)	
X White			0.3979** (0.0066)			0.3169** (0.0080)			0.1058** (0.0071)
X Black			0.5982** (0.0128)			0.3218** (0.0198)			0.1537** (0.0206)
X Hispanic			0.7715** (0.0158)			0.3597** (0.0217)			0.1399** (0.0199)
X Other race			0.7059** (0.0136)			0.4278** (0.0201)			0.0907** (0.0194)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	2,294,567	2,294,567	2,294,567	2,096,943	2,096,943	2,096,943	2,144,875	2,144,875	2,144,875
R-squared	0.0896	0.0902	0.0899	0.1230	0.1234	0.1230	0.0920	0.0921	0.0920

Pooled OLS regressions with robust standard errors in parentheses. Significance: **1%, *5%, +10%.

Dependent variable = 1 if the young adult lives with a parent in the current year, zero otherwise.

Data source: American Community Survey, 2006-2011 and 2013-2016. Sample is all individuals aged 18-35. Unemployment rates are age-group specific.

Exhibit 5: Share of Moves that are Boomerang Moves, by Age Group



Data source: American Community Survey, 2006-2016.

Exhibit 6: Characteristics of Boomerang Movers vs Other Movers, by Age Group (ACS)

	Age 18-23		Age 24-29		Age 30-35	
	Boomerang	Other Moves	Boomerang	Other Moves	Boomerang	Other Moves
% of movers who are:						
Male	50.9%	48.9%	52.8%	51.5%	54.5%	52.8%
White	65.0%	62.1%	65.3%	60.4%	63.4%	55.7%
Black	12.3%	13.4%	13.1%	13.0%	14.9%	14.2%
Hispanic	9.5%	10.1%	8.8%	11.1%	8.8%	12.1%
Immigrant	8.3%	11.9%	8.9%	17.9%	10.3%	24.1%
Single, no children	85.5%	82.0%	65.4%	50.9%	42.7%	27.8%
Single, with children	6.4%	6.5%	9.9%	10.5%	10.0%	9.2%
Married, no children	5.0%	6.9%	13.2%	19.4%	23.0%	23.5%
Married, with children	3.0%	4.6%	11.5%	19.3%	24.2%	39.5%
Less than high school	8.1%	10.6%	7.2%	9.3%	8.9%	11.0%
High school	43.3%	45.0%	37.6%	30.4%	41.9%	30.8%
Some college	29.4%	35.1%	24.5%	25.2%	23.8%	23.6%
College graduate	18.7%	8.9%	30.1%	34.6%	24.7%	33.8%
Moving interstate	28.2%	20.7%	27.6%	19.6%	25.4%	19.8%
Moving across MIGPUMAs	56.6%	43.5%	52.0%	37.0%	45.7%	35.8%
Number of observations	57,732	743,535	51,666	640,714	20,878	457,163

Data source: American Community Survey, 2006-2016.

Sample is all young adults who moved within the past year.

Exhibit 7: Characteristics of Moves Across MIGPUMAs, by Whether the Move is a Boomerang (ACS)

	Age 18-23		Age 24-29		Age 30-35	
	Boomerang	Other Moves	Boomerang	Other Moves	Boomerang	Other Moves
All individuals						
% of moves that are across MIGPUMAs	56.5%	43.5%	52.0%	37.1%	45.6%	35.9%
Among moves across MIGPUMAs:						
Average change in unemployment rate	0.3%	-0.5%	0.3%	-0.1%	0.2%	-0.1%
% of moves to higher unemployment	51.8%	47.8%	52.1%	49.1%	50.7%	48.5%
Less than high school						
% of moves that are across MIGPUMAs	40.7%	30.0%	39.9%	30.1%	37.1%	29.4%
Among moves across MIGPUMAs:						
Average change in unemployment rate	-0.2%	-0.3%	0.3%	0.1%	0.4%	0.0%
% of moves to higher unemployment	49.9%	47.9%	53.5%	49.7%	51.4%	49.2%
High school graduates						
% of moves that are across MIGPUMAs	45.9%	49.3%	43.4%	32.0%	40.6%	31.7%
Among moves across MIGPUMAs:						
Average change in unemployment rate	0.3%	-0.6%	0.3%	-0.1%	0.3%	-0.1%
% of moves to higher unemployment	51.8%	46.8%	52.0%	49.3%	51.8%	49.0%
Some college						
% of moves that are across MIGPUMAs	58.6%	37.5%	47.8%	34.3%	45.2%	34.3%
Among moves across MIGPUMAs:						
Average change in unemployment rate	0.5%	-0.5%	0.5%	-0.2%	0.1%	-0.1%
% of moves to higher unemployment	52.4%	47.3%	53.6%	48.8%	51.2%	49.0%
College graduates						
% of moves that are across MIGPUMAs	84.7%	54.7%	70.2%	45.8%	58.2%	43.4%
Among moves across MIGPUMAs:						
Average change in unemployment rate	0.3%	0.4%	0.3%	-0.1%	0.1%	-0.2%
% of moves to higher unemployment	51.7%	53.5%	51.1%	49.1%	48.7%	47.7%
White						
% of moves that are across MIGPUMAs	59.7%	46.5%	54.2%	39.6%	47.6%	38.4%
Among moves across MIGPUMAs:						
Average change in unemployment rate	0.3%	-0.3%	0.3%	-0.1%	0.1%	-0.1%
% of moves to higher unemployment	51.2%	48.5%	51.8%	49.3%	50.3%	48.6%
Black						
% of moves that are across MIGPUMAs	47.8%	40.5%	46.4%	34.7%	39.2%	34.3%
Among moves across MIGPUMAs:						
% of moves to higher unemployment	0.7%	-0.9%	0.6%	-0.3%	0.5%	-0.2%
% of moves to higher unemployment	54.2%	45.5%	56.1%	47.9%	54.5%	47.5%
Hispanic						
% of moves that are across MIGPUMAs	44.3%	30.3%	40.8%	26.0%	36.9%	24.9%
Among moves across MIGPUMAs:						
Average change in unemployment rate	0.7%	-0.9%	0.4%	0.0%	0.4%	0.0%
% of moves to higher unemployment	55.0%	45.2%	53.2%	50.4%	50.5%	49.6%
Other race						
% of moves that are across MIGPUMAs	57.3%	42.2%	53.6%	36.8%	49.1%	36.9%
Among moves across MIGPUMAs:						
Average change in unemployment rate	0.2%	-0.5%	0.1%	-0.1%	0.0%	-0.1%
% of moves to higher unemployment	51.5%	47.5%	49.5%	48.6%	48.9%	48.3%
Number of observations	57,732	743,535	51,666	640,714	20,878	457,163

Data source: American Community Survey, 2006-2011 and 2013-2016. Sample is all young adults who moved across MIGPUMAs within the past year. Unemployment rates are age-group specific.

Exhibit 8: Factors Associated with Moves Being Boomerang Moves (ACS)

	Age 18-23	Age 24-29	Age 30-35
Age	0.0160** (0.0002)	-0.0020** (0.0002)	-0.0068** (0.0002)
Male	-0.0009 (0.0006)	-0.0058** (0.0007)	-0.0063** (0.0006)
Married	-0.0522** (0.0010)	-0.0383** (0.0007)	-0.0183** (0.0008)
Has children	-0.0190** (0.0012)	-0.0197** (0.0008)	-0.0163** (0.0007)
Black	-0.0156** (0.0009)	-0.0175** (0.0011)	-0.0130** (0.0010)
Hispanic	0.0019 (0.0012)	-0.0043** (0.0012)	-0.0045** (0.0012)
Other race	0.0009 (0.0010)	-0.0014 (0.0011)	-0.0014 (0.0010)
Immigrant	-0.0217** (0.0011)	-0.0288** (0.0010)	-0.0229** (0.0008)
Less than high school	-0.0157** (0.0010)	-0.0290** (0.0012)	-0.0176** (0.0011)
Some college	-0.0075** (0.0008)	-0.0194** (0.0010)	-0.0150** (0.0009)
College graduate	0.0344** (0.0016)	-0.0358** (0.0010)	-0.0281** (0.0009)
Unemployed	0.0518** (0.0014)	0.0892** (0.0019)	0.0607** (0.0019)
Not in labor force	-0.0162** (0.0007)	-0.0104** (0.0009)	-0.0126** (0.0008)
In school	-0.0307** (0.0008)	0.0071** (0.0009)	0.0028* (0.0011)
Median house value in destination (\$M)	0.0058* (0.0028)	-0.0026 (0.0025)	-0.0124** (0.0021)
Unemployment rate in destination	0.0564** (0.0053)	0.0754** (0.0088)	0.0134 (0.0098)
Year FE	Y	Y	Y
Observations	693,919	604,402	415,718
R-squared	0.0340	0.0216	0.0220

Pooled OLS regressions with robust standard errors in parentheses. Significance: **1%, *5%, +10%.

Sample is all individuals who moved within the past year. Dependent variable = 1 if move is a boomerang, 0 otherwise.

Data source: American Community Survey, 2006-2011 and 2013-2016. Unemployment rates are age-group specific. Origin and destination refer to the pre-move and post-move MIGPUMA, respectively.

Exhibit 9: Factors Associated with Across MIGPUMA Moves Being Boomerang Moves (ACS)

	Age 18-23			Age 24-29			Age 30-35		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Unemployment rate in origin	0.0124 (0.0102)	0.0139 (0.0102)	0.0115 (0.0102)	0.0334+ (0.0192)	0.0358+ (0.0192)	0.0336+ (0.0192)	0.0088 (0.0213)	0.0116 (0.0213)	0.0087 (0.0213)
Unemployment rate in destination - origin	0.0631** (0.0079)			0.0903** (0.0149)			0.0381* (0.0162)		
Unemployment rate in destination - origin									
X Less than high school		0.0028 (0.0188)			0.0042 (0.0270)			0.0465 (0.0296)	
X High school		0.0725** (0.0086)			0.0691** (0.0223)			0.0693** (0.0249)	
X Some college		0.1174*** (0.0132)			0.1462** (0.0260)			0.0237 (0.0279)	
X College graduate		-0.0659* (0.0271)			0.1058** (0.0216)			0.0232 (0.0227)	
X White			0.0387** (0.0091)			0.0869** (0.0172)			0.0301 (0.0194)
X Black			0.1024** (0.0135)			0.1673** (0.0279)			0.0967** (0.0274)
X Hispanic			0.1850** (0.0243)			0.0497 (0.0378)			0.0490 (0.0401)
X Other race			0.0789** (0.0180)			0.0408 (0.0336)			0.0015 (0.0313)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	339,685	339,685	339,685	243,181	243,181	243,181	160,354	160,354	160,354
R-squared	0.0689	0.0691	0.0690	0.0347	0.0347	0.0347	0.0331	0.0331	0.0331

Pooled OLS regressions with robust standard errors in parentheses. Significance: **1%, *5%, +10%.

Sample is all individuals who moved across MIGPUMAs within the past year. Dependent variable = 1 if the move is a boomerang, 0 otherwise.

Other controls not shown: age, gender, marital status, children, race/ethnicity, educational attainment, labor force status, immigrant status, origin MIGPUMA median house value, destination - origin MIGPUMA median house value.

Data source: American Community Survey, 2006-2011 and 2013-2016. Unemployment rates are age-group specific. Origin and destination refer to the pre-move and post-move MIGPUMA, respectively.

Exhibit 10: "Lifetime" Boomerang Rates in the PSID

		Age 18-23	Age 24-29	Age 30-35
% of young adults observed from age 19 or earlier	70.1%	92.3%	69.4%	38.0%
Among sample young adults observed from age 19: % that have ever boomeranged	10.5%	5.3%	18.1%	24.0%
Among young adults with complete age 19-29 history*: % that have ever boomeranged by age 29	23.0%			

*Sample restricted to individuals who are first observed at age 19 or younger and who have turned age 29 by 2015.

Data source: Panel Study of Income Dynamics, 1997-2015. Sample: All young adults in the PSID 1997 sample families who were ever aged 18-35, 1997-2015.

Exhibit 11: Factors Associated with Parental Coresidence (PSID)

	Age 18-23			Age 24-29			Age 30-35		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Working	-0.0103 (0.0124)	0.0020 (0.0115)	0.0020 (0.0115)	-0.0660** (0.0120)	-0.0368** (0.0109)	-0.0372** (0.0109)	-0.0448** (0.0128)	-0.0333** (0.0116)	-0.0332** (0.0116)
Not in labor force	-0.0076 (0.0215)	0.0208 (0.0196)	0.0208 (0.0196)	-0.0023 (0.0167)	0.0097 (0.0146)	0.0093 (0.0146)	0.0268+ (0.0158)	0.0146 (0.0138)	0.0146 (0.0138)
Student	0.0313** (0.0120)	0.0339** (0.0112)	0.0339** (0.0112)	-0.0709** (0.0146)	-0.0337* (0.0133)	-0.0344** (0.0133)	-0.0633** (0.0166)	-0.0353* (0.0154)	-0.0353* (0.0154)
Previously launched		-0.3782** (0.0111)	-0.3799** (0.0268)		-0.4244** (0.0124)	-0.4837** (0.0304)		-0.5560** (0.0300)	-0.5497** (0.0474)
In educational institution		0.1502** (0.0240)	0.1502** (0.0240)		0.1046** (0.0244)	0.1028** (0.0244)		0.1754 (0.1243)	0.1756 (0.1243)
State median house value (\$M)	0.2280** (0.0462)	0.2061** (0.0433)	0.2060** (0.0434)	0.1654** (0.0472)	0.0674 (0.0430)	0.0654 (0.0430)	-0.0066 (0.0422)	-0.0354 (0.0372)	-0.0354 (0.0372)
State unemployment rate	0.0046** (0.0015)	0.0023 (0.0014)		0.0078** (0.0022)	0.0068** (0.0020)		0.0045+ (0.0024)	0.0037+ (0.0022)	
State unemployment rate X Previously launched			0.0024 (0.0022)			0.0084** (0.0020)			0.0036+ (0.0022)
X Never left			0.0023 (0.0015)			0.0004 (0.0038)			0.0047 (0.0067)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	12,791	12,791	12,791	12,481	12,481	12,481	10,075	10,075	10,075
R-squared	0.3648	0.4407	0.4407	0.2626	0.3878	0.3882	0.2320	0.3595	0.3595

Pooled OLS regressions with robust standard errors in parentheses. Significance: **1%, *5%, +10%.

Dependent variable = 1 if the young adult lived with a parent in the current year, 0 otherwise.

Controls not shown: age, gender, marital status, children, race/ethnicity, educational attainment, health status; parents' education, income, wealth, tenure status, number of rooms per capita, number of other household members.

Data source: Panel Study of Income Dynamics. All individuals in the PSID 1997 sample families who were ever aged 18-35, 1997-2015.

Exhibit 12: Factors Associated with Transitioning out of Parental Coresidence (PSID)

	Age 18-23			Age 24-29			Age 30-35		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
All controls measured at time t-1:									
Working	0.0136 (0.0161)	0.0135 (0.0161)	0.0133 (0.0161)	0.0544* (0.0271)	0.0582* (0.0270)	0.0580* (0.0270)	0.0036 (0.0454)	0.0090 (0.0453)	0.0086 (0.0455)
Not in labor force	-0.0791* (0.0310)	-0.0777* (0.0309)	-0.0785* (0.0309)	-0.1168** (0.0404)	-0.1061** (0.0403)	-0.1065** (0.0403)	-0.2503** (0.0502)	-0.2217** (0.0504)	-0.2220** (0.0505)
Student	0.0179 (0.0176)	0.0190 (0.0176)	0.0188 (0.0176)	0.0308 (0.0430)	0.0176 (0.0425)	0.0177 (0.0425)	-0.0422 (0.0846)	-0.0489 (0.0854)	-0.0469 (0.0853)
Previously launched		0.0611** (0.0212)	0.1484* (0.0644)		0.1149** (0.0257)	0.1406* (0.0681)		0.1970** (0.0578)	0.2739* (0.1105)
State median house value (\$M)	-0.4485** (0.0778)	-0.4466** (0.0778)	-0.4451** (0.0778)	-0.0268 (0.1350)	0.0193 (0.1336)	0.0200 (0.1336)	-0.1324 (0.2294)	-0.0916 (0.2255)	-0.0975 (0.2267)
State unemployment rate	-0.0070** (0.0025)	-0.0068** (0.0025)		0.0005 (0.0069)	-0.0003 (0.0068)		-0.0310* (0.0136)	-0.0292* (0.0134)	
State unemployment rate X Previously launched			-0.0135** (0.0052)			-0.0021 (0.0084)			-0.0337* (0.0149)
X Never left			-0.0061* (0.0025)			0.0011 (0.0075)			-0.0221 (0.0153)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	7,395	7,395	7,395	2,349	2,349	2,349	932	932	932
R-squared	0.0620	0.0641	0.0644	0.0990	0.1105	0.1106	0.0917	0.1098	0.1104

Pooled OLS regressions with robust standard errors in parentheses. Significance: **1%, *5%, +10%.

Sample is restricted to young adults who lived in a parent's home in t-1.

Dependent variable = 1 if the young adult moved out of a parent's home by t, 0 otherwise.

Controls not shown: age, gender, marital status, children, race/ethnicity, educational attainment, health status; parents' education, income, wealth, tenure status, number of rooms per capita, number of other household members.

Data source: Panel Study of Income Dynamics. All individuals in the PSID 1997 sample families who were ever aged 18-35, 1997-2015.

Exhibit 13: Factors Associated with Making a Boomerang Move (PSID)

All controls measured at time t-1:	Age 18-23		Age 24-29		Age 30-35	
	(1)	(2)	(1)	(2)	(1)	(2)
Working	-0.0242 (0.0158)	-0.0248 (0.0158)	-0.0083 (0.0104)	-0.0083 (0.0104)	-0.0120 (0.0093)	-0.0120 (0.0093)
Not in labor force	-0.0279 (0.0208)	-0.0276 (0.0209)	0.0076 (0.0141)	0.0078 (0.0141)	0.0011 (0.0119)	0.0014 (0.0119)
Student	-0.0212 (0.0184)	-0.0223 (0.0184)	-0.0074 (0.0123)	-0.0068 (0.0123)	-0.0026 (0.0128)	-0.0023 (0.0129)
Own state unemployment rate	0.0026 (0.0020)	0.0035+ (0.0020)	0.0030+ (0.0016)	0.0034* (0.0017)	0.0034* (0.0016)	0.0039* (0.0017)
Own state median house value (\$M)	0.1505* (0.0696)	0.2071** (0.0761)	0.0295 (0.0381)	0.0391 (0.0424)	0.0027 (0.0322)	0.0051 (0.0350)
Living in same state as any parent		0.0112 (0.0136)		0.0122* (0.0059)		0.0056 (0.0047)
Parent state - own state unemployment rate		0.0062 (0.0041)		0.0026 (0.0026)		0.0026 (0.0030)
Parent state - own state median house value (\$M)		0.2930* (0.1312)		0.0216 (0.0542)		0.0046 (0.0438)
Year FE	Y	Y	Y	Y	Y	Y
Observations	3,626	3,626	7,899	7,899	6,755	6,755
R-squared	0.0360	0.0383	0.0258	0.0266	0.0262	0.0267

Pooled OLS regressions with robust standard errors in parentheses. Significance: **1%, *5%, +10%.

Sample is restricted to young adults who did not live with a parent in t-1.

Dependent variable = 1 if the young adult moved (boomeranged) to a parent's home by t, 0 otherwise.

Controls not shown: age, gender, marital status, children, race/ethnicity, educational attainment, health and employment/student status; parents' education, income, wealth, tenure status, number of rooms per capita, number of other household members.

Data source: Panel Study of Income Dynamics. All individuals in the PSID 1997 sample families who were ever aged 18-35, 1997-2015.

**Exhibit 14: Prospects for Parental Labor Market Conditions for Today's Teenagers (Age 16-17),
by Race and Ethnicity (ACS)**

	White	Black	Hispanic	Other Race
Average unemployment rate for 18-23 year olds in MIGPUMAs where teenagers live	11.7%	13.9%	13.1%	12.6%
% of teenagers living in MIGPUMAs where the unemployment rate for 18-23 year olds:				
is above national average	39.7%	61.1%	55.7%	48.4%
is below national average	60.3%	38.9%	44.3%	51.6%
Average unemployment rate for 24-35 year olds in MIGPUMAs where teenagers live	6.0%	6.7%	6.5%	6.2%
% of teenagers living in MIGPUMAs where the unemployment rate for 24-35 year olds:				
is above national average	40.7%	56.4%	55.4%	47.4%
is below national average	59.3%	43.6%	44.6%	52.6%

Data source: American Community Survey 2016. Sample is all individuals aged 16-17.

Appendix Table 1: Mobility and Parental Coresidence Rates in the ACS and PSID, by Age Group

	Age 18-23	Age 24-29	Age 30-35	Total
Mobility rate				
PSID 2-year mobility (1997-2015)	56.4%	56.7%	41.5%	52.6%
Number of observations	14,669	11,925	9,423	36,017
ACS 1-year mobility (2006-2016)	31.0%	30.0%	21.2%	27.5%
Number of observations	2,573,046	2,335,723	2,380,082	7,288,851
Parental coresidence rate				
PSID (1997-2015)	57.2%	23.8%	13.3%	34.2%
Number of observations	16,779	14,144	11,457	42,380
ACS (2006-2016)	55.6%	27.3%	14.3%	32.9%
Number of observations	2,573,046	2,335,723	2,380,082	7,288,851
Share of moves that are boomerang				
PSID (1997-2015)	9.0%	6.8%	5.3%	7.5%
Number of observations	8,268	6,757	3,912	18,937
ACS (2006-2016)	7.0%	7.2%	4.4%	6.4%
Number of observations	801,267	692,380	478,041	1,971,688
Transition rate out of coresidence*				
PSID (1997-2015)	36.6%	38.1%	27.6%	36.0%
Number of observations	8,432	2,805	1,234	12,471

*as a share of those who are living with parents in the previous period.

Data source: American Community Survey, 2006-2016; Panel Study of Income Dynamics, 1997-2015.

Appendix Table 2: ACS Descriptive Statistics

	Age 18-23	Age 24-29	Age 30-35	Total
Male	51.2%	50.0%	49.5%	50.3%
Married	8.2%	40.9%	68.5%	38.5%
Has children	8.2%	32.5%	57.8%	32.3%
White	61.3%	62.6%	63.2%	62.3%
Black	12.3%	11.0%	10.4%	11.3%
Hispanic	11.6%	11.5%	11.3%	11.5%
Other race	14.8%	14.9%	15.1%	14.9%
Immigrant	10.0%	15.2%	19.3%	14.7%
Less than high school	12.9%	8.4%	8.7%	10.1%
High school	45.8%	32.9%	31.2%	36.9%
Some college	34.0%	25.7%	24.1%	28.1%
College graduate	6.9%	32.3%	35.2%	24.3%
Working	54.5%	74.2%	76.0%	67.9%
Unemployed	10.2%	6.9%	5.4%	7.5%
Not in the labor force	35.3%	18.9%	18.6%	24.6%
In school	57.9%	17.7%	9.2%	29.0%
MIGPUMA median house value	\$161,959	\$169,647	\$168,954	\$166,721
MIGPUMA unemployment rate	15.9%	9.0%	7.1%	10.8%
Living with a parent	54.1%	25.5%	12.7%	31.4%
Moved in the past year	30.2%	28.8%	19.4%	26.2%
% of moves in the past year that are boomerang moves	7.2%	7.4%	4.3%	6.6%
Number of observations	2,294,567	2,096,943	2,144,875	6,536,385

Unless noted, numbers refer to fraction of sample.

Data source: American Community Survey, 2006-2011 and 2013-2016.

All dollar values are converted to 2000 US dollars.

Appendix Table 3: PSID Descriptive Statistics

	Age 18-23	Age 24-29	Age 30-35	Total
Coreidence and transition rates:				
Living with parents	55.3%	21.9%	11.7%	32.4%
Boomeranged (among those not living with parents)	11.5%	5.2%	2.7%	6.1%
Transitioned out of coreidence (among those living with parents)	37.8%	40.8%	32.3%	38.0%
Young adult characteristics:				
Male	50%	48%	46%	48%
Married	9%	38%	57%	31%
Has children	20%	48%	70%	43%
White	45%	49%	52%	48%
Black	40%	38%	34%	38%
Hispanic	12%	11%	11%	11%
Other race	2.7%	2.5%	2.8%	2.7%
Foreign born parent	12%	11%	12%	12%
Less than high school	21%	11%	11%	15%
High school	43%	37%	36%	39%
Some college	31%	31%	32%	32%
College graduate	5%	21%	20%	14%
Residing in an educational institution	14%	2%	0%	6%
Previously launched	52%	91%	98%	77%
Working	51%	70%	75%	64%
Unemployed	16%	12%	9%	13%
Not in the labor force	5%	7%	10%	7%
Student	28%	11%	6%	16%
State unemployment rate (average)	11.07%	6.62%	5.06%	7.79%
State median house value (average)	\$154,025	\$155,546	\$154,014	\$154,559
Parent characteristics:				
Age (average)	46.9	52.1	57.5	51.2
Married	46%	43%	39%	43%
Less than high school	14%	13%	15%	14%
High school	36%	38%	39%	38%
Some college	31%	30%	29%	30%
College graduate	19%	19%	17%	19%
Median income	\$39,038	\$36,752	\$29,645	\$35,946
Median total wealth	\$43,313	\$58,141	\$79,487	\$56,045
Homeowner	66%	70%	74%	69%
Number of rooms in home (average)	6.4	6.2	6.1	6.2
Number of other household members in home (average)	1.5	1.1	0.8	1.2
Number of observations	14,824	12,571	9,779	37,174

Unless noted otherwise, numbers refer to % of sample. All dollar values are converted to 2000 US dollars.

Data source: Panel Study of Income Dynamics, 1997-2015. Sample: All young adults in the PSID 1997 sample families who were ever aged 18-35, 1997-2015.