

Joint Center for Housing Studies
Harvard University

Young American Adults Living in Parental Homes

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W02-3

May 2002

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Abstract

This paper reviews the literature of young adults (ages 25-34) living in parental homes in regard to gender difference, racial difference, family structure variation, parental resource gap, personal income gap, and the long-term trend. Our models examine the effect of personal income, parental resource, and race on the living arrangements of young adults. Most of the investigation is drawn from two datasets: Current Population Survey and Panel Study of Income Dynamics. Our model results demonstrate strongly that young adults' personal income is the major factor that constrains them from independent living. Over time, patterns of young adults' living with parents concur with economic situations such as the income distribution, especially that of young adults.

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I. Introduction

Most youths in the United States leave their parents' homes at the age of 18 or soon after (Zeng et al. 1994), but many young adults continue to live in or return to their parents' homes at a later age. According to the 2000 U.S. Census, there were 3.9 million multigenerational family households, nearly four percent of all households (Census Bureau 2001). Among these multigenerational households were two distinguishable groups. About 2.6 million households consisted of the householder and the householder's children and/or grandchildren. Another 1.3 million households consisted of three generations--the householder and the householder's children and parents (or parents-in-law). The latter is more or less a result of a parent-caring culture where people not only raise their children but also take care of their elderly parents. The focus of this paper is on the former.

According to our tabulation of the annual Current Population Survey (CPS) of March 2001, 2.3 million men and 1.5 million women in the United States between 25 and 34 years old still lived in their parents' houses. That is 12.5 percent of men and 7.9 percent of women of this age group. In fact, many of these young adults not only live with their parents but also raise their own children there. What makes these young adults continue to live in parental homes? In what ways are they different from those who live independently, including those who take their parents to their own homes? Particularly, what is the driving force that makes the trend of living with parents shift over time? These are the questions that we try to answer in this paper.

II. Literature Review

Young adults continuing to live in parental homes are not unique in the United States. In fact, the proportion of young adults aged 25-29 still living with parents is lower in the United States than in some European countries, as shown in Figure 1.

Figure 1: Percent of Men and Women Aged 25-29 Still Living with Parents, 1994

| Country | Men | Women |
|----------------|------|-------|
| France | 22.5 | 10.3 |
| Germany | 28.8 | 12.7 |
| United Kingdom | 20.8 | 10.8 |
| Greece | 62.6 | 32.1 |
| Italy | 66.0 | 44.1 |
| Spain | 64.8 | 47.6 |
| United States | 15.6 | 8.8 |

Data Source: Data for the European countries are from Reher (1998). Data for the United States are our tabulations of the 1994 CPS.

The peak age of youth leaving parental homes also differs in different countries. While it peaks at 18 in the U.S., it peaks at 17 in Japan, 23 in China, 21 in France, and 19 in Sweden. In Korea, it peaks at 26 for males and 23 for females (Zeng et al. 1994).

Previous studies relating to young adults living at parental homes are generally clustered around six topics: gender difference, racial difference, family structure variation, parental resource gap, personal income gap, and the long-term trend of young adults' living arrangements. Findings in each of these topics are briefly reviewed as follows.

Gender Differences

It has long been known that young men are more likely than young women to stay at and return to parental homes. For example, Young (1975) found that the average age for females leaving home is 21.5 years, while that for males is 23.8 years. Buck and Scott

(1993) also found that “women leave home earlier than men both to marriage and to independent living, but especially to marriage” (p. 873). Haurin et al. (1994) found that after controlling for personal income, rental cost, and other demographic factors, being female raises the probability of living apart from parents by 14 percent.

What explains this gender gap? Some studies assert that all or most of these differences are accounted for by women’s earlier age at marriage, although it has been found that unmarried mothers are actually more likely to live with their parents than unmarried fathers (Goldscheider & Da Vanzo 1985).

Cultural factors may also attribute to such a difference. Shehan and Dwyer (1989) report that boys are more likely than girls to think parents have an obligation to house their children and less likely to think that children have an obligation to pay. Economic factors are also found to be important. Glick & Lin (1986) found that young men living with relatives (usually the parents) had a substantially lower employment rate and a higher unemployment rate than young men living away from relatives. By contrast, young women living with relatives had a higher employment rate than women (usually married) who lived away from relatives. The young women living away from relatives usually had a husband to support them and their children in their own homes.

Racial Differences

In general, African Americans, Hispanics, and Asians have been found to be substantially more likely than non-Hispanic whites to live in extended families. Angel and Tienda (1982) found that Black households were 14 percent more likely than non-Hispanic white households to be extended ones, when female headship, income-poverty ratio, education, foreign birth, and employment were controlled. Focusing on unmarried, childless adults over 25, Hernandez (1989) reported that approximately 50 percent of Black and Hispanic adults lived with family members in 1980, compared to 35 percent of whites. Hogan et al. (1990) found that 45 percent of black, and 22 percent of white, unmarried mothers aged 19-26 in 1984 lived with their own mothers.

The explanation for race and ethnic difference in co-residence is often conceptualized as a choice between cultural preference and social structure (White 1994). For example, Goldscheider & Davanzo (1989) found that blacks are less likely and Asians much less likely to leave their parental homes, controlling for parents' and children's resources and community characteristics. This suggests a cultural rather than economic difference.

Glick & Lin (1986) found, however, that whites ages 18 to 29 in 1940 were 40 percent more likely than their black counterparts to live with their parents, but in 1984 they were 22 percent less likely. Therefore, White (1994) argued that declining economic opportunity and reduced marriage rates for black Americans seem more likely explanations of the white and black difference than an increase in the preference of black parents and children for family living. But he suggested that the higher co-residence rate of Hispanic youths is more likely to be at least partially attributable to cultural differences.

More detailed ethnic differences were also found in some previous studies. Henandes (1989) reported that Puerto Ricans are more likely than other Hispanics to live away from family. Expanding this type of analysis to Asian ethnic groups in the United States, Kanjanapan (1989) demonstrated that Vietnamese, Korean, Filipino, and Chinese young people over 18 are much more likely, but Japanese Americans are less likely, to live with family than are whites.

Family Structure Variation

In three ways the likelihood that a young adult will stay in or return to parental home depends on family structure. First, young adults' marital status is clearly a determinant of their leaving or staying at home. In Beck's (1984, 1989) longitudinal studies of extended-family experience, for both men and women, the unmarried reported much higher levels of extended family living than the married. Grigsby and McGowan (1986) found that, at ages 18 to 22, 90 percent of co-resident adult children are single. They also found that 55 percent of co-resident children 30 years old or older have never

married, while about one-third have experienced marital dissolution. Sweet and Bumpass (1987) found that the never-married children are much more likely than married children to be living at home.

Aquilino (1990) also asserted that the marital status of adult children was easily the strongest predictor of co-residence. Having one or more unmarried adult children dramatically raised the likelihood of parents having an adult child in their home. Goldscheider & Goldscheider (1994) pointed out that much of the delay in leaving home could probably be attributed to the rise in the age at which young people marry.

Second, young adults' own children may also reduce their propensity for co-residence with parents. Haurin (1994) estimated that a ten percent increase in the probability of having a child present in the household raises the probability of living apart from parents by 4.9 percent. Other studies also document that the presence of their own children reduces unmarried children's co-residence (Avery et al 1992, Ward et al 1992) and decreases the likelihood of home returning (DaVanzo & Goldscheider 1990).

Third, parents' family structure substantially affects young adults' home leaving and returning. Crowding, as indicated by the number of siblings or family size, reduces the likelihood of adult children staying at home (Bianchi 1987, Young 1987, Goldscheider and DaVanzo 1989). Those with more siblings leave earlier (Young 1987, Mitchell et al. 1989, Kerckholt and Macrae, 1992).

Bianchi (1987) reported that divorced, separated, and remarried mothers were less likely than currently married women to have adult children (ages 18 to 24) living with them. Aquilino (1990) also found that parents who had lost their spouses through widowhood or marital breakups were less likely to have a co-resident child than the currently married parents, which suggests that co-resident living arrangements met the needs of children more than of parents. In other words, children take advantage of co-resident parents, rather than taking care of single parents.

Avery et al (1992) found that living in a one-parent family increases nest leaving among those who remain unmarried and reduces the likelihood of early nest leaving to marriage. But Buck & Scott (1993) reported that coming from a single-parent family increases the probability of both young men and women leaving to live independently.

Stepparents are less likely than the intact families to expect children to live at home until marriage (Goldscheider & Goldscheider 1987). The effect of stepfamily status on early home leaving appears to be strongest for whites and Asians and weakest for African Americans (Goldscheider & Goldscheider 1993), and stronger for daughters than sons (Aquilino 1991, Goldscheider and Goldscheider 1993).

Parental Resources Gap

Studies investigating the effect of parental resources on young adults' living arrangement generated inconsistent findings. Hill (1977), using the PSID data, found that parental income has no effect on children leaving home. Ten years later, Bianchi (1987), using the CPS fertility data, found that higher parental income significantly reduced children's living away from home. Using Australian data, Young (1987) also found that family economic resources raised the likelihood of co-residence. Later on, however, Goldscheider and DaVanzo (1989) used the National Longitudinal Study of the High School Class of 1972 and found that greater parental resources significantly increased the likelihood that young adults would leave home both before and at marriage. Rosenzweig and Wolpin (1990, cited in Schoeni 1993) also found that a rise in parental income by \$5,000 increased the probability that the adult child would receive a monetary transfer while living outside the home by 2.2 percent and decreased the probability of co-residence by 2.5 percent.

More recently, Avery et al. (1992) used 1984 PSID data and found that, overall, parental income had no significant effect on children's nest leaving, but the effects of parental income differ sharply by the age of the young adult. Higher parental income decreases nest leaving significantly in the early stages of the nest leaving process whereas it accelerates it significantly in the waning stages. He also found that parental income has no effect on leaving for premarital residential independence, but that the higher the parental income, the less likely the young adult is to leave home due to marriage. Each increment of \$10,000 reduces the odds of leaving home due to marriage by 0.87.

Similarly, a longitudinal study using the 1968-1988 PSID data by Whittington and Peters (1996) found that parental income has a negative effect on children becoming independent until about age 18 for girls and age 19 for boys. After that point, higher parental income increases the probability that the child will become independent. They speculated that parents of young children might prefer that their children remain dependent, but parents of older children might either be neutral or prefer their children to be on their own. Parents with higher income have more power over their children and would be better able to elicit the desired behavior.

Finally, White (1994) argues that, regardless of what statistical significance parental income may have on children's leaving home to have independent lives, a two-tier structure may exist in terms of parental financial assistance to their adult children. Residential independence of children is possible for better-off parents while a relatively large amount of resources flow from parents to children. For those from lower income parents, however, co-residence may be necessary if children are to have access to parents' resources.

Personal Income Gap

Researchers seem to agree that higher personal income of children helps independent residence of young adults. McElroy (1985) found that children with higher income are more likely to leave parental homes and less likely to return to their parents' homes later. Shehan and Dwyer (1989) reported that most students felt 18 and 21 were appropriate ages to leave home and that financial difficulties were the chief legitimating factor for staying longer than this. Boyd & Pryor (1989) also argued that high housing costs and low wages "trap" children in their parents' home.

Rosenzweig and Wolpin (1990, cited in Schoeni 1993) estimated that a \$5,000 increase in the adult child's earnings reduces the probability of co-residence by 11 percent. DaVanzo & Goldscheider (1990) also claimed that children with higher incomes are more likely to leave parental homes and less likely to return to parental homes later.

Buck & Scott (1993) discovered that high national unemployment rates do delay leaving to independent living, but local unemployment rates have little effect. They thus concluded that when jobs are scarce throughout the nation, not surprisingly, young people are wary of striking out on their own. Hughes (1996) discovered that individual earnings had moderate to large impacts on young adults' living arrangements. In addition, metropolitan rents had strong effects: in areas with higher rents, young adults were much less likely to marry or to live alone.

Goldscheider & Goldscheider (1994) attribute late nest leaving to the dramatic decline in the economic fortunes of young adults in the 1980s. According to them, the average per capita income of high school graduates ages 25 to 34 fell by 16 percent between 1973 and 1986, from \$26,364 to \$22,226 per year in constant dollars. Even among college graduates in that age group, the average income was one percent lower in 1986 than in 1973.

White (1994) also cited the fall of real earnings as a factor. He cited the US Bureau of the Census (1992b) which indicated that between 1979 and 1989, the proportion of male full-time, full-year workers ages 18 to 24 earning "low" wages (below the poverty level for a family of four) jumped from 18 to 35 percent of all full-time full-year workers. For women, the change was from 29 to 43 percent. Therefore, he asserted that children's resources are much more likely than parents' resources to buy them independence. Meanwhile, Haurin et al. (1994) estimated that a ten percent increase in children's potential wage raises the probability of independent living by six percent, while a ten percent increase in local real rents results in a decrease by 1.4 percent in household formation.

On the other hand, an interesting phenomenon is children's changing expectations for successful independent living. Hartung & Sweeney (1991) interviewed some co-resident adult children and asked if they were living at home because they could not afford to establish their own households or because they did not want to forego their parents' standard of living. They found that the adult children they interviewed were willing to forego some independence and tolerate some restrictions in order to have more luxuries. As the luxuries of the older generation have become necessities of the younger, the minimum level of earnings necessary for independent living may have risen.

Nevertheless, the effect of low personal income manifests consistently in one particular group, single mothers, who usually have lower income. According to London's study (1998) using the CPS data, the rate of living with parents among single mothers was relatively stable between 1970 and 1995 (14 percent in 1995).

The Long-Term Trend

The overall trend of young adults living with parents is a shallow U-shaped pattern between 1940 and 1990 (White 1994). A study in Britain also noted that rates of leaving home rose until the early 1970s but subsequently declined (Murphy and Wang 1998). It attributed this U-shaped pattern partially to the relative and absolute poorer economic situations of young people. The exact numbers cited by previous studies in the United States are actually not consistent with each other. Figures 2 and 3 demonstrate the different numbers reported by different researchers on the percentage of young adults (ages 18-24) and (ages 25-34) living with parents, respectively.

Figure 2: Percent of Young Adults (Ages 18-24) Living at Parental Homes

| Study | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 |
|----------------------|------|------|------|------|------|------|
| Goldscheider, 1997 | 62.8 | 51.1 | 42.0 | 42.3 | 45.5 | |
| Stegman et al., 1995 | | | 43.0 | 47.3 | 48.4 | 52.8 |
| Heer et al., 1985 | | 54.4 | 45.8 | 48.2 | 52.2 | |

Figure 3: Percentage of Young Adults (Ages 25-34) Living at Parental Homes

| | Study | 1950 | 1960 | 1970 | 1980 | 1990 |
|--------|----------------------|------|------|------|------|------|
| Total | Masnick, 1996 | | 8.7 | 8 | 8.6 | 11.9 |
| | Stegman et al., 1995 | | 9.1 | 8 | 8.7 | 11.5 |
| | Heer, 1985 | 14.9 | 9.5 | 8.2 | 9.2 | |
| Male | Masnick, 1996 | | 10.3 | 9.5 | 10.3 | 14.5 |
| | Stegman et al., 1995 | | 10.9 | 9.5 | 10.5 | 15.0 |
| Female | Masnick, 1996 | | 7.2 | 6.6 | 6.9 | 9.5 |
| | Stegman et al., 1995 | | 7.4 | 6.6 | 7 | 8.1 |

Heer et al. (1985) discovered different trends for young adults (ages 18-34) who had their own families and those who did not. He found that among those with their own families to support, there was a rise between 1970 and 1983 in the odds of living with parents. On the contrary, between 1960 and 1983, those without families had increased odds of living apart from parents.

Several more recent studies emphasized such a difference between the married and unmarried. White (1994) argued that “if we restrict our denominator to never-married adults, co-residence rates have declined steadily since 1940” (p. 82). Figure 4 shows Goldscheider’s report (2000) on young adults (ages 18-24) between 1940 and 1990 living with parents as a share of those who have not yet established new families of their own.

Figure 4: Young Adults (Ages 18-24) Living with Parents as a Share of Those Who Have Not Yet Established New Families of Their Own

| | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 |
|---------|------|------|------|------|------|------|
| Percent | 82.4 | 77.1 | 69.5 | 66.1 | 63.4 | 60.0 |

Data Source: Goldscheider, 2000

The opposite trends presented in Figures 2 and 4 are possible, as reduced marriage rate resulted in a larger body of never-married youth. For this group of people, although the absolute number of co-resident young adults could be larger, its share among the never-married youth could be smaller due to a larger denominator.

III. A Theoretical Framework

With such diverse attentions and diversified findings in the existing literature, we set out to achieve three focused goals. First, we want to set up a theoretical framework that can help reconcile the differences found in the long-term trend and also explain the changing of that trend. Second, while acknowledging that both cultural and economic factors matter, we want to identify the magnitude of economic factors, particularly the personal income gap, by controlling cultural and other factors through logistical regression models using micro data. Third, we will use the same data to test some of the previous findings to see if we can contribute to the current literature.

As we mentioned before, the trend in the share of young adults living with parents over time is a U-shaped pattern, despite that the exact numbers provided by previous researchers vary from each other. Figures 5 and 6 graphically display such patterns in young adults aged 18-24 and 25-34, respectively.

Figure 5

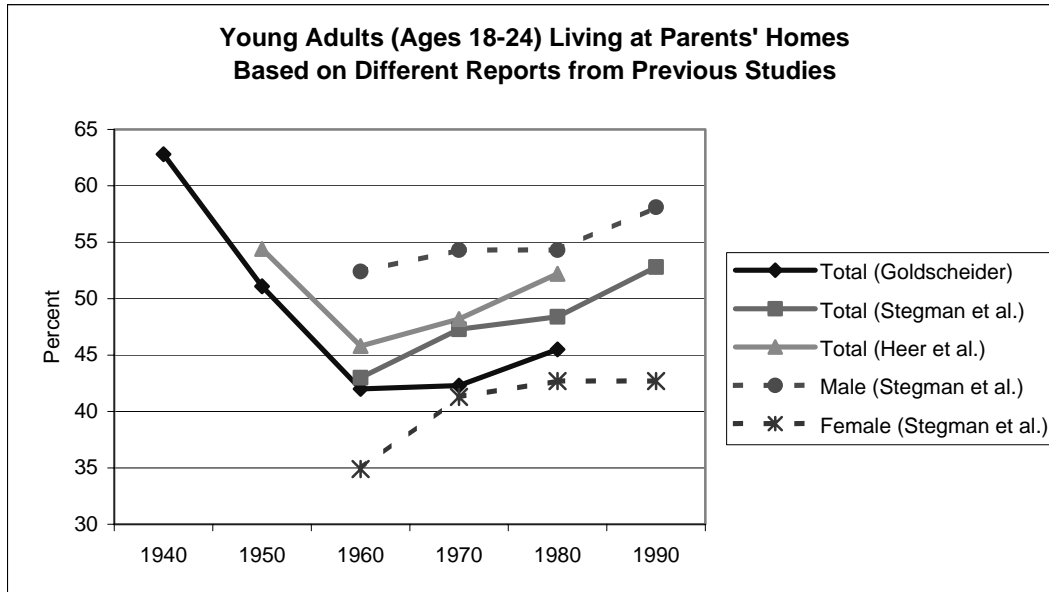
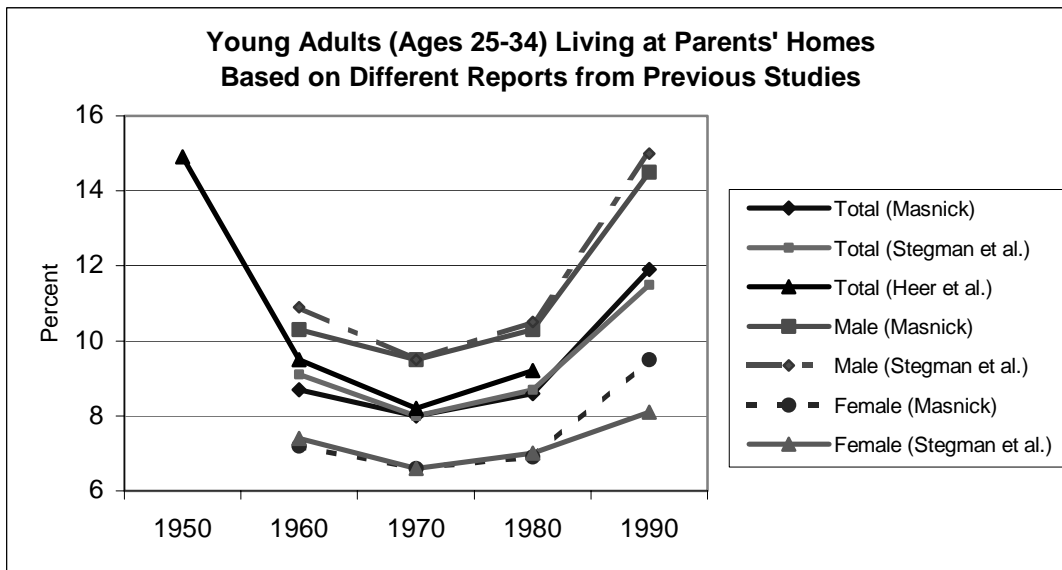


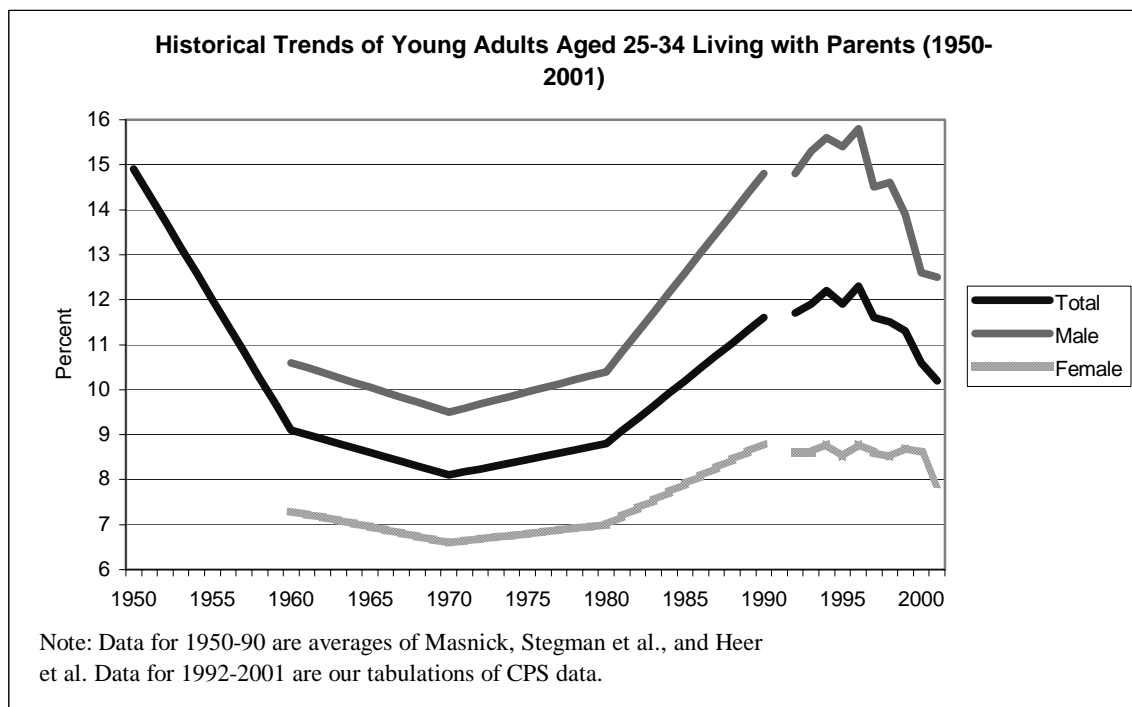
Figure 6



We would like to focus on the young adults aged 25-34 rather than those aged 18-24. The reason is that our primary concern is housing, but the younger group has rarely achieved homeownership yet and many of them are still in college. Using the CPS data, we are able to extend the trend to year 2001 (See Figure 7). We understand that there is a

definition difference between the CPS and the census data, which was the data source of the previous studies cited in Figure 3. Masnick (1996) and Goldscheider (2000) have pointed out that the CPS data code college students as living with parents, and therefore may inflate the percentage of living at parental homes. However, such a difference will only affect the relative position of the later period trend (1992-2001) to that of the earlier period trend (1950-1990), while the inner period trend and the long-term trend are upheld.

Figure 7



It is remarkable that the CPS data actually shows a reversed U-shape pattern during the 1990s, especially for the males, although it has to be said that the current level of young adults (25-34) living with parents is still higher than the 1980, 1970, and 1960 levels. We also found that the U-shaped pattern between the 1960s and 1980s is actually quite in line with many other U-shaped patterns that have been identified by two economists, Bennett Harrison and Barry Bluestone (1988) (See Figure 8). All these patterns seem to suggest that economic factors are likely the driving forces that affect the long-term trend of young adults living with parents. They reinforce our belief in personal

income as the dominant factor influencing the long-term trend. (Of course, local area housing cost is a restrictive factor, which will be discussed later.) If the economists update their charts, they may find them well in line with the changed pattern in the 1990s as we charted for young adults living with parents. If that is true, the reversed U patterns may turn out to be one of the important differences between the growth in the 1980s and that in the 1990s.

Figure 8

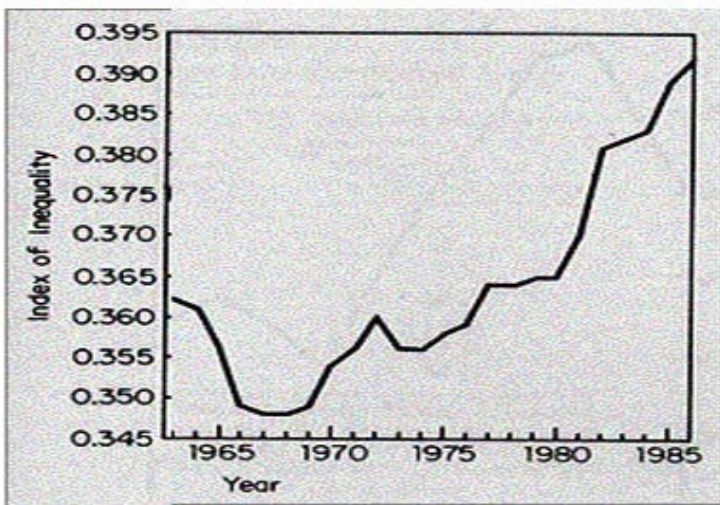


Fig. 1.3 Harrison and Bluestone (1988)
Family Income Inequality, 1963 – 1986 (GINI Index)

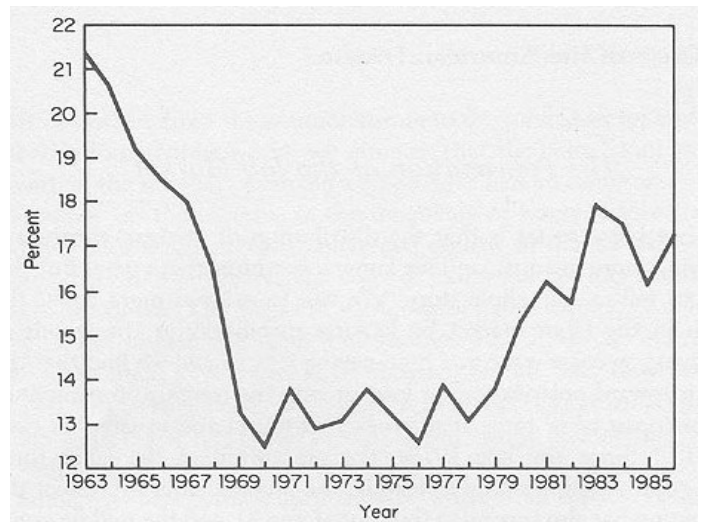


Fig. 5.3 Harrison and Bluestone (1988)
Low-Wage Share of Total Employment, 1963 - 1986

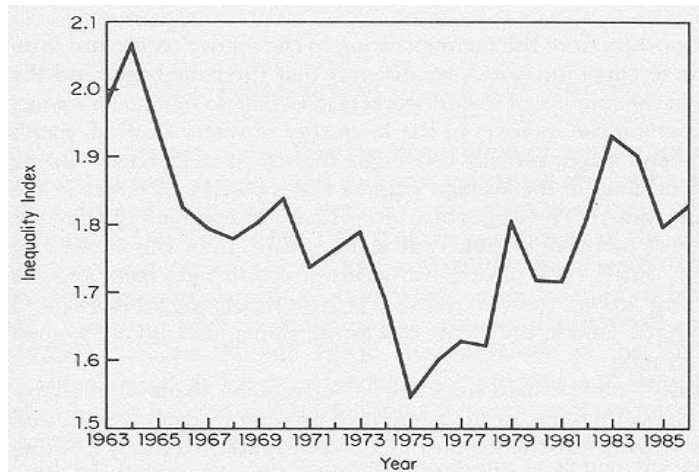


Fig. 5.2 Harrison and Bluestone (1988)
Inequality in Annual Wages and Salaries, 1963 – 1986

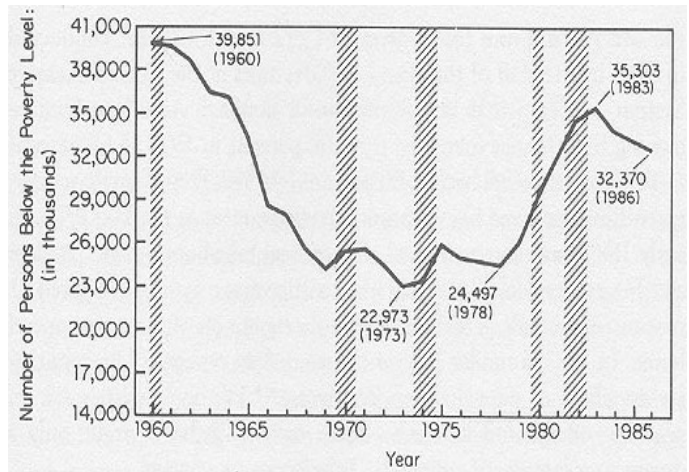


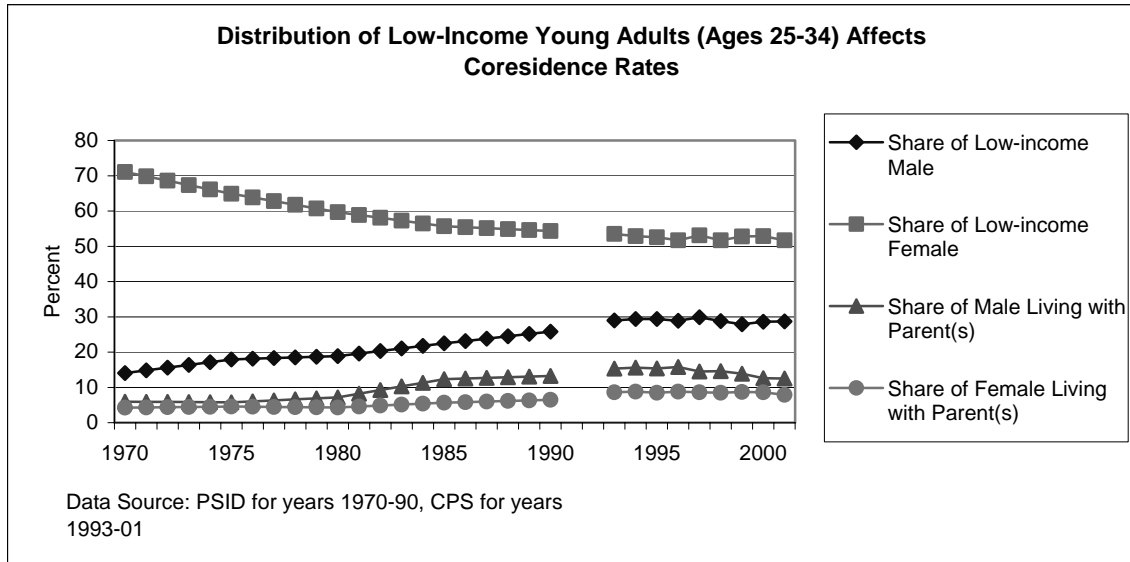
Fig. 5.5 Harrison and Bluestone (1988)
Number of Persons Below the Poverty Level: 1960 – 1986

Of course, there are forces that have been driving the ups and downs in the long-term trend of young adults living with parents, and the literature shows that both cultural and economic factors matter. Sociologists' arguments concerning social and cultural reasons, particularly marital influence, are fairly valid. The declined marriage rate and delays in marriage certainly play an important role in young adults' living arrangements. We like the idea proposed by some sociologists that suggests we should look at unmarried young adults separately (Goldscheider 2000). As they pointed out, after taking those who are married out of the denominator, the percentage of young adults (at least the younger adults aged 18-24) living at parental homes has actually been steadily decreasing since 1940 (See Figure 4 again).

However, such a view may become misleading if we interpret it as saying that social norms are the only important factors. In fact, researchers, including these sociologists, also pointed out the importance of economic factors such as parental resources and young adults' personal income. How, then, do we link these economic factors with the long-term trend of young adults living with parents to show their relationship?

We examine the distribution of young adults' personal income and its trend over time. If personal income matters, as the literature shows, the distribution may reveal the link we are looking for. A bigger cluster at the lower end of the distribution indicates that more young adults are too constrained by their incomes to have independent residence. Figure 9 capitulates such a relationship between personal income distribution of young adults (ages 25-34) and their living arrangements by gender. As the percentage of young males earning less than 80 percent of the young adults' median income increased, the percentage of young males living at parental homes increased. As the percentage of low-income young males leveled off, so did the percentage of young males living with parents.

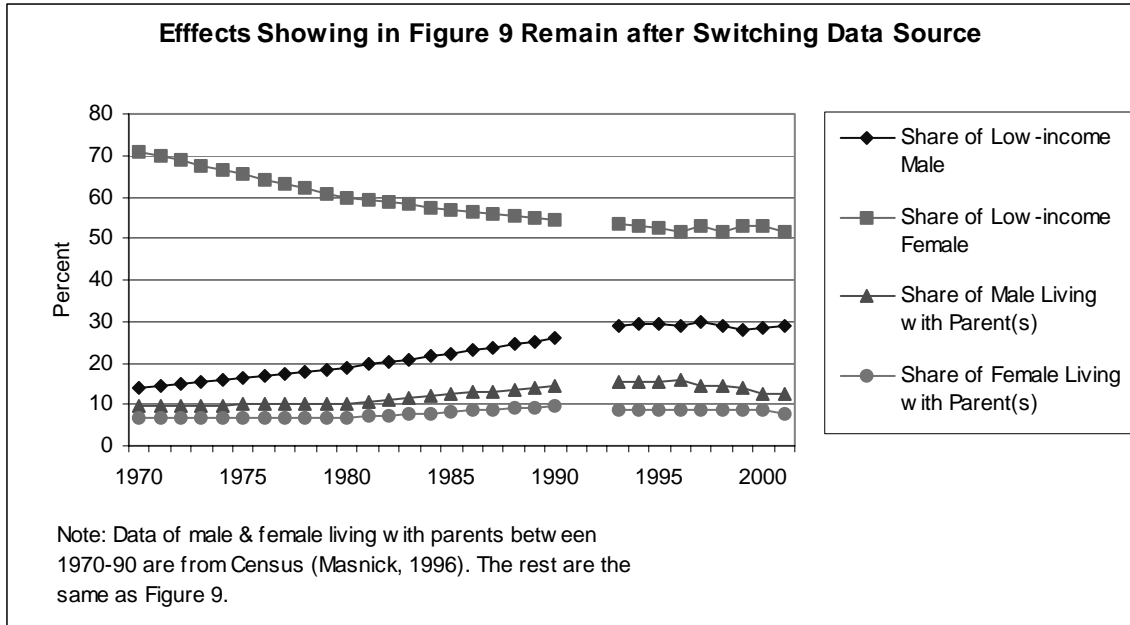
Figure 9



Females, thanks to the social progress made since the 1970s, have been paid better, and more have been working. Therefore, the percentage of low-income females has been reduced remarkably. If not for this social progress, the percentage of young females living at parental homes might have climbed just like that of the males.

We use both the PSID data and the CPS data in displaying this trend, and previous literature validated such mingling of data, as Beckett et al. (1988) found that the two data sets are generally comparable. We do notice, however, that the PSID data give us lower estimates of young adults (ages 25-34) living in parental homes than the census numbers quoted by some previous studies. To prove that such discrepancy does not distort the pattern we have discovered, we re-run the above analysis by replacing the PSID numbers with the Census numbers cited in Masnick (1996). As shown in Figure 10, the general pattern of a correlation between the percentage of low-income young adults and the percentage of young adults living in parental homes is upheld.

Figure 10



IV. Data and Methodology

The Current Population Survey (CPS) and the (PSID) are the two major datasets we use for our analysis. The CPS is a survey of about 50,000 households conducted by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS). It is the nation’s primary source of labor force statistics for the entire population and has a history that goes back to the 1940s. Suitable for our needs and purpose, it contains information on personal income, as well as various demographic variables such as age, gender, race, educational attainment, and marital status.

The annual CPS data of March 2001 is fairly recent data, and to our knowledge, no published research has used it to examine the determinants of young adults’ living arrangements. In the data, there are 17,345 people between the ages of 25 and 34. One of the limitations of using the CPS data for our analysis is that the data do not have information on rent. To amend, we generate a median monthly contract rent variable based on the American Housing Survey (AHS) of 1999 that is adjusted for four regions and metropolitan status, namely, inner cities, suburbs, and non-metro areas. We

incorporate this new variable with 12 variations into the CPS data. We did this because rent is obviously a factor in determining young adults' living arrangements, and previous research has proved its importance (Hughes 1996). For marital status, we classify as being married only those with spouse present and treat the rest (married with spouse absent, divorced, widowed, separated, and never married) as non-married, because previous studies have found that those with marriage problems such as divorce or separation are likely to return to parental homes just as the singles do.

Figure 11 is a summary of some characteristics of the CPS data for young adults between 25 and 34 years old. We include both cultural and economic factors that could influence their decisions on living arrangements. The difference between unweighted and weighted means is small, indicating that the sample was well designed and randomly drawn.

Figure 11: Sample Characteristics of Young Adults (Ages 25 to 34) in 2001

| Variable | Variable Definition | Unweighted Mean (n=17345) | Weighted Mean (N=3.74 million) |
|--------------------|---|------------------------------|-----------------------------------|
| Living Arrangement | Dummy Variable =1 if living at parents' home | 0.09 | 0.10 |
| Personal Income | Annual personal total income | 27653.84 | 28977.73 |
| Rent | Area Rent (adjusted for regional and metro status) | 514.48 | 515.16 |
| Gender | Dummy Variable=1 if male | 0.49 | 0.49 |
| Marital Status | Dummy Variable=1 if married | 0.54 | 0.53 |
| Age | Young adults' age | 29.63 | 29.61 |
| <u>Race</u> | | | |
| Non-Hispanic White | Dummy Variable=1 if non-Hispanic white | 0.61 | 0.66 |
| Non-Hispanic Black | Dummy Variable=1 if non-Hispanic black | 0.09 | 0.13 |
| Hispanic | Dummy Variable=1 if Hispanic | 0.24 | 0.15 |
| Other | Dummy Variable=1 if Asian and others | 0.06 | 0.06 |
| <u>Education</u> | | | |
| Less High | Dummy Variable=1 if education is less than high school | 0.14 | 0.12 |
| High School | Dummy Variable=1 if education is high school diploma | 0.30 | 0.29 |
| Some College | Dummy Variable=1 if education is some years in college | 0.28 | 0.29 |
| College & Up | Dummy Variable=1 if education is bachelor's degree and up | 0.28 | 0.30 |

Data Source: CPS 2001

Figure 12 displays some of the different characteristics between young adults who live with parents and those who live independently, according to the March 2001 CPS data. Those living with parents obviously have less personal income.¹ Compared to those having independent living, this group seems to have more males, fewer whites, are less college educated, and are mostly unmarried.

Figure 12: Comparison of Young Adults (Ages 25 to 34) Living with Parents and Living Independently by Selected Characteristics

| Characteristics | Living with Parents | Not Living with Parents | Living with Parents | Not Living with Parents |
|------------------------|---------------------|-------------------------|---------------------|-------------------------|
| | Unweighted | | Weighted | |
| Median Personal Income | 17,000 | 23,400 | 18,000 | 24,973 |
| Median Age | 29 | 30 | 28 | 30 |
| <u>Gender</u> | | | | |
| Male | 61% | 48% | 61% | 48% |
| Female | 39% | 52% | 39% | 52% |
| | 100% | 100% | 100% | 100% |
| <u>Marital Status</u> | | | | |
| Married | 6% | 59% | 5% | 58% |
| Non-Married | 94% | 41% | 95% | 42% |
| | 100% | 100% | 100% | 100% |
| <u>Race</u> | | | | |
| Non-Hispanic White | 56% | 62% | 60% | 66% |
| Non-Hispanic Black | 13% | 9% | 20% | 13% |
| Hispanic | 24% | 23% | 14% | 15% |
| Other | 7% | 6% | 6% | 6% |
| | 100% | 100% | 100% | 100% |
| <u>Education</u> | | | | |
| Less High | 13% | 15% | 12% | 12% |
| High School | 36% | 29% | 37% | 28% |
| Some College | 30% | 28% | 30% | 29% |
| College & Up | 21% | 28% | 22% | 31% |
| | 100% | 100% | 100% | 100% |

Data Source: CPS 2001.

¹ Income is obviously related to young adults' living arrangement, as shown in the following table. The lower co-residence rate in the lowest income female group is perhaps due to welfare system that is more likely to assist this particular group.

| Personal Income | Share of Young Adults (Ages 25-34) Living with Parents | |
|----------------------|--|---------|
| | Males | Females |
| Less than \$5,000 | 27.8% | 6.8% |
| \$5,000 to \$20,000 | 16.2% | 10.0% |
| \$20,000 to \$35,000 | 10.5% | 7.6% |
| More than \$35,000 | 5.0% | 6.0% |

One of the biggest limitations in using the CPS data for our analysis is that the data do not provide parental information, if the child is already living independently away from the parent. Therefore, we turn to the Panel Survey of Income Dynamics (PSID) for additional and comparable information. The PSID is a longitudinal survey of a representative sample of individuals and the families in which they reside. It has been conducted since 1968 and the data were collected annually through 1997 and then biennially. The data are collected by the Survey Research Center at the University of Michigan, and the sample size has been growing from 4,800 families in 1968 to more than 7,000 families in 2001. Through all those years, not only did the survey continue to follow as many of the original families as possible, but it also followed children as they “split off” from their parents’ households. Therefore, we can obtain the parental information for the youths we are tracing.

For each year of the data, the survey releases files for public use twice, the preliminary and the final data sets. The most recent final dataset as we started our investigation is the 1993 data, in which 5,061 young adults were between the ages of 25 and 34. For the 542 people living in parental homes, the parents’ information is readily available. For those who are living independently, we try to trace back their split-off year and therefore find their parents’ household ID numbers. However, we are only able to find 2,120 cases with their parents’ information. Adding those living in parental homes, our sample has 2,662 cases altogether.

In the PSID data, we cannot obtain comparable rent information for those living with parents as if they live independently. Also, it is impossible to generate and incorporate an area average rent using the AHS, as we did with the CPS data, because the geographic variables in PSID are incomparable to that in AHS. We could only use the available geographical variables (four regions and size of cities) in PSID to somewhat control for regional and urban variations. For race variables, the PSID data only record the race of the household header and interracial marriage would change a person’s record of race. Therefore, we use parent’s race information to represent the young adult’s racial status.

Figure 13 is a summary of the sample characteristics. The difference between the unweighted and weighted means indicates that the sample was stratified and

proportionally more blacks and Hispanics were drawn in the sample and there are more cases in the South and with less education.

Figure 13: Sample Characteristics of Young Adults (Ages 25 to 34) in 1993 PSID

| Variable | Variable Definition | Unweighted Mean (n=2662) | Weighed Mean (N=52,369) |
|---------------------|---|-----------------------------|----------------------------|
| Living Arrangement | Dummy Variable=1 if living at parents' home | 0.20 | 0.10 |
| Personal Income | Annual personal total income in 1993 | 17,562.35 | 22,408.02 |
| Parental Income | Annual parental income in 1993 | 30,462.51 | 33,796.75 |
| Parental Tenure | Dummy Variable=1 if owner in 1993 | 0.63 | 0.64 |
| Gender | Dummy Variable=1 if male | 0.49 | 0.49 |
| Marital Status | Dummy Variable=1 if married | 0.44 | 0.54 |
| Age | Young adults' age | 29.58 | 29.91 |
| <u>Race</u> | | | |
| Non- Hispanic White | Dummy Variable=1 if non-Hispanic white | 0.50 | 0.61 |
| Non-Hispanic Black | Dummy Variable=1 if non-Hispanic black | 0.31 | 0.28 |
| Hispanic | Dummy Variable=1 if Hispanic | 0.18 | 0.10 |
| Other | Dummy Variable=1 if Asian and others | 0.01 | 0.01 |
| <u>Education</u> | | | |
| Less High | Dummy Variable=1 if education is less than high school | 0.21 | 0.14 |
| High School | Dummy Variable=1 if education is high school diploma | 0.43 | 0.40 |
| Some College | Dummy Variable=1 if education is some years in college | 0.21 | 0.24 |
| College & Up | Dummy Variable=1 if education is bachelor's degree and up | 0.14 | 0.22 |
| <u>Geography</u> | | | |
| Urban | Dummy Variable=1 if in area >20,000 people | 0.86 | 0.81 |
| Northeast | Dummy Variable=1 if in Northeast | 0.15 | 0.24 |
| Midwest | Dummy Variable=1 if in Midwest | 0.21 | 0.27 |
| South | Dummy Variable=1 if in South | 0.48 | 0.33 |
| West | Dummy Variable=1 if in West | 0.16 | 0.16 |

Data Source: PSID, 1993

Figure 14 displays some of the different characteristics between young adults (ages 25-34) who live with parents and those who do not, according to the 1993 PSID data. The personal income gap was much larger than that in the CPS data, even with weighting. Those living with parents only had half or even less than a third of the income of those living independently, depending on if we look at weighted or unweighted data.

There was also a parental income gap and children of lower income parents were more likely to live with parents.

Figure 14: Comparison of Young Adults (Ages 25 to 34) Living with Parents and Living Independently by Selected Characteristics, 1993 PSID

| Characteristics | Living with Parents | Not Living with Parents | Living with Parents | Not Living with Parents |
|--------------------------------|---------------------|-------------------------|---------------------|-------------------------|
| | Unweighted | | Weighted | |
| Median Personal Income | 4,975 | 17,000 | 10,400 | 20,000 |
| Median Parental Income in 1993 | 14,000 | 24,000 | 21,580 | 25,000 |
| Median Age | 28 | 30 | 27 | 30 |
| <u>Parental Tenure, 1993</u> | | | | |
| Owner | 68% | 62% | 68% | 62% |
| Renter | 32% | 38% | 32% | 38% |
| | 100% | 100% | 100% | 100% |
| <u>Gender</u> | | | | |
| Male | 62% | 46% | 68% | 47% |
| Female | 38% | 54% | 32% | 53% |
| | 100% | 100% | 100% | 100% |
| <u>Marital Status</u> | | | | |
| Married | 12% | 48% | 4% | 40% |
| Non-Married | 88% | 52% | 96% | 60% |
| | 100% | 100% | 100% | 100% |
| <u>Race</u> | | | | |
| Non-Hispanic White | 24% | 57% | 64% | 61% |
| Non-Hispanic Black | 36% | 29% | 24% | 28% |
| Hispanic | 40% | 13% | 12% | 10% |
| Other | 0 | 1% | 0 | 1% |
| | 100% | 100% | 100% | 100% |
| <u>Education</u> | | | | |
| Less High | 37% | 17% | 26% | 13% |
| High School | 41% | 44% | 44% | 40% |
| Some College | 14% | 23% | 18% | 25% |
| College & Up | 8% | 16% | 13% | 22% |
| | 100% | 100% | 100% | 100% |

Data Source: PSID 1993.

The PSID survey occasionally has a supplemental section on household wealth, starting from 1984. As household wealth is an important measure of parental resources and may have influence on children's living arrangement, we construct a sample that links the 1993 PSID with the 1984 PSID, so as to include household wealth as a variable.

Thus we obtained a dataset that has 1,444 observations of young adults between 25 and 34 in 1993, and they were all living with parents in 1984. Considering that some parents may have retired by 1993 and their income in 1993 may not accurately reflect their resources at the time when the children were still in their homes, we look at parental income in 1984 instead of 1993.

This linked 1984-1993 PSID dataset may have one data bias in the sense that it includes some youths who were already 18 years old or older in 1984 but still lived with parents while their counterparts who lived independently were excluded. A linked 1976-1993 PSID dataset gives us a more balanced sample and each child was under 18 in 1976 and was interviewed again in 1993 as a young adult between 25 and 34.

The race variable in these two linked datasets only reflects racial but not ethnic origin, for the PSID survey did not yet collect information on ethnicity separately. Appendix A contains tables that show the sample characteristics and some of the different characteristics between young adults (ages 25-34) who lived with parents and those who did not, based on these two linked datasets.

In the next section, we report our findings through logistic regression models using each of the four datasets, namely, the 2001 CPS data, the 1993 PSID data, the 1984-1993 PSID data, and the 1976-1993 PSID data. As we discussed earlier, each dataset has its advantages and disadvantages, and none of them is nearly perfect. By using multiple data sets and time periods in building logistic models, we wish to overcome bias and come up with conservative conclusions.

For each dataset, we estimate the effect of various factors on the probability of young adults living at parental homes, controlling for selected demographic characteristics. Our dependent variable is whether the young adult lives in parental home (1=yes, 0=no). Independent variables include young adults' personal income, average rent in an area (for CPS 2001 data), parental resources (for PSID data), age, gender, race, educational attainment, marital status, and regional and urban variation (for PSID data).

For personal income, parental income and wealth variables, we divided the actual numbers by \$5,000 to see the difference that every \$5,000 makes on young adults' housing arrangement. Similarly, for the area rent variable, we segment it by \$100 to see

the effect of every \$100 change in monthly gross rent on the housing arrangement of young adults between 25 and 34.

V. Model Results and Findings

We have summarized the findings of previous studies on the topic of young adults living at parental homes and categorized them into 6 parts, namely, gender difference, racial difference, family structure variation, parental resource gap, personal income gap, and the long-term trend. As we have already dealt with the long-term trend in the theoretical framework section, we will focus now on personal income, parental resource, and racial difference, respectively, and briefly cover gender difference and family structure. In each of the focused areas, we have run nested logistical regression models using different datasets, and we will discuss our model results and findings in detail and, wherever possible, corresponding to the literature review.

Effect of Personal Income

Figure 15 introduces five of our models that demonstrate the consistent significance of personal income in young adults' (ages 25-34) living arrangements, after step-by-step controlling for area rent, gender, age, marital status, race, and education. The overall model fit is quite good after controlling for all those variables and the pseudo R-square index reaches the level of 21.2 percent.

Figure 15: Model Results from the 2001 CPS Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---------------------------|----------|----------|-----------|----------|----------|
| Intercept | -1.85*** | -2.65*** | 0.39 | 0.37 | 0.47 |
| Personal Income | -0.09*** | -0.09*** | -0.10*** | -0.11*** | -0.11*** |
| Area Rent | | 0.16*** | 0.15*** | 0.16*** | 0.16*** |
| Gender | | | 0.30*** | 0.30*** | 0.31*** |
| Age | | | -0.08*** | -0.08*** | -0.08*** |
| Marital Status | | | -3.04*** | -3.04*** | -3.04*** |
| Black | | | | -0.05 | -0.06 |
| Hispanic | | | | -0.17* | -0.07 |
| Other Minorities | | | | 0.03 | 0.05 |
| Less than High School | | | | | -0.52*** |
| Some College | | | | | -0.01 |
| College & Graduate School | | | | | -0.18* |
| -2 Log Likelihood | 9089.22 | 9058.74 | 7333.10 | 7327.43 | 7293.43 |
| Pseudo R-square | 1.79% | 2.11% | 20.76% | 20.82% | 21.19% |
| | *p<.05 | **p<.01 | ***p<.001 | | |

As consistently shown by the estimated models, personal income has a negative impact on the probability of young adults' living in parental homes. More specifically, as shown in Model 5, for young adults who live in the same area and have the same gender, marital status, race, and educational attainment, we estimate that for each additional \$5,000 in their personal income, the fitted odds of their living independently versus living with parents are multiplied by 1.1 times. To express this in a more intuitive way, we calculate the probability of their living at parental homes by each additional \$5,000 of personal income, assuming that the person is an unmarried white 30-year-old with high school diploma while the area rent is equal to the sample mean. As Figure 16 shows, almost every \$5,000 increase in personal income reduces about 2 percentage points of the probability of living at parental homes.

Figure 16: Estimated Probability of Living at Parental Homes by Selected Income Levels

| Personal Income | Probability of Living at Parental Home (Males) | Probability of Living at Parental Home (Females) |
|-----------------|---|---|
| 5,000 | 0.30 | 0.24 |
| 10,000 | 0.28 | 0.22 |
| 15,000 | 0.26 | 0.20 |
| 20,000 | 0.24 | 0.18 |
| 25,000 | 0.22 | 0.17 |
| 30,000 | 0.20 | 0.15 |
| 35,000 | 0.18 | 0.14 |
| 40,000 | 0.16 | 0.13 |
| 45,000 | 0.15 | 0.11 |
| 50,000 | 0.14 | 0.10 |
| 55,000 | 0.12 | 0.09 |
| 60,000 | 0.11 | 0.08 |

Data Source: 2001 CPS.

Note: These estimates are for unmarried 30-year-old whites with high school diploma while the area rent is set to sample mean.

We obtain very similar results from the 1993 PSID data. Logistic models consistently demonstrate that personal income is a statistically significant predictor in estimating whether a young adult aged 25-34 lives in parental home or independently. As Figure 17 shows, the effect of personal income is significant by itself and remains significant after controlling for other factors similar to those used in the CPS data models, in addition to some parental and geographic information. While pseudo-R is about nine percent when personal income is examined alone, it reaches the level of 33 percent after controlling for all the other factors in the model.

Figure 17: Model Results from the 1993 PSID Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---------------------------|----------|----------|----------|----------|----------|----------|
| Intercept | -0.48*** | -0.51*** | 4.13*** | 2.70*** | 2.61*** | 1.90** |
| Personal Income | -0.31*** | -0.31*** | -0.31*** | -0.30*** | -0.29*** | -0.29*** |
| Parental Income | | -0.07*** | -0.07*** | -0.04*** | -0.04*** | -0.04*** |
| Parental Tenure | | 0.63*** | 0.55*** | 0.72*** | 0.72*** | 0.77*** |
| Gender | | | 0.81*** | 0.82*** | 0.81*** | 0.82*** |
| Age | | | -0.15*** | -0.14*** | -0.14*** | -0.14*** |
| Marital Status | | | -1.83*** | -2.04*** | -2.02*** | -2.01*** |
| Black | | | | 0.93*** | 0.94*** | 0.95*** |
| Hispanic | | | | 2.03*** | 2.02*** | 1.95*** |
| Other Minorities | | | | -1.34 | -1.36 | -1.46 |
| Less than High School | | | | | 0.20 | 0.21 |
| Some College | | | | | -0.04 | -0.07 |
| College & Graduate School | | | | | 0.11 | 0.11 |
| Northeast | | | | | | 0.55* |
| South | | | | | | 0.36* |
| West | | | | | | 0.50* |
| Urban | | | | | | 0.34 |
| -2 Log Likelihood | 2254.78 | 187.79 | 1847.84 | 1672.48 | 1670.08 | 1658.11 |
| Pseudo R-square | 8.86% | 11.57% | 25.31% | 32.40% | 32.49% | 32.98% |

*p<.05 **p<.01 ***p<.001

Controlling for parental resources and selected demographic characteristics, the fitted odds of young adults living independently versus living with parents are multiplied by 1.3 times. We estimate the probabilities that young adults with different personal incomes live with parents, assuming they are unmarried 30-year-old white males with high school diploma, owner parents, living in urban areas in the Northeast, with parental income set to the sample mean. Figure 18 shows that as such a person's income increased by \$5,000, he would be more likely to live independently by one to seven percentage points.

Figure 18: Estimated Probability of Living at Parental Homes by Selected Income Levels

| Personal Income | Probability of Living at Parental Home |
|-----------------|--|
| 5,000 | 0.41 |
| 10,000 | 0.35 |
| 15,000 | 0.28 |
| 20,000 | 0.23 |
| 25,000 | 0.18 |
| 30,000 | 0.14 |
| 35,000 | 0.11 |
| 40,000 | 0.09 |
| 45,000 | 0.07 |
| 50,000 | 0.05 |
| 55,000 | 0.04 |
| 60,000 | 0.03 |

Data Source: 1993 PSID data.

Note: These estimates are for unmarried 30-year-old white males with high school diploma, owner parents, living in urban areas in Northeast, with parental income set to sample mean.

Similar model results from the linked 1984-1993 and 1976-1993 PSID data reinforce the conclusive importance of personal income (See Appendix B). All of our model work proves the effect of personal income on young adults' living arrangement as such: the higher the personal income, the less likely that the young adult would live at parental homes. Such a relationship is statistically significant both before and after controlling for parental resources and critical demographic characteristics.

In addition to controlling for housing cost (as we have shown in the CPS model using area average rent from the AHS data) when examining the effect of personal income, the *change* in housing cost may also be important to consider. We test it using the American Housing Survey (AHS), for it is a survey based on the physical housing unit and therefore possible to measure housing cost change more accurately.

We merge the AHS 1999 data with 1997 data at individual level for those aged between 25 and 34 in 1999. This allows us to find those who lived in the same unit during the two years and therefore we can obtain changes over time. First, we calculate the rate of change in rent, housing cost, and income, and take the median value for inner cities, suburbs and non-metros in each of the four regions in the nation. Then we merge these variables to the 1999 AHS data selecting all young adults (ages 25-34) and estimate

logistic regression models, which are similar to our models using the CPS and PSID data but with additional information on the local median rent in 1997, local median rent change rate, and local median housing cost change rate relative to income change rate. Local median rent in 1997 was controlled because large increases in rents in low cost markets may have far less of an impact than small increases in high cost markets.

Our AHS models show that the effect of personal income holds (See Appendix C). As Model 1 in Appendix Table CC shows, the AHS model can replicate the CPS model result. Model 2 in Appendix Table CC shows that, after controlling for changes in area median rent, the baseline area median rent in 1997 as well as other selected demographic characteristics, personal income in 1999 is still a decisive factor in young adults' (ages 25-34) living arrangements. The control for rent change is necessary, for that measures whether it is getting easier or harder to find affordable housing in a local market at given observed incomes for individual adult children. The model results show that the fitted odds of young adults living independently versus living with parents are multiplied by 1.1 times for every additional \$5,000 in personal income.

Finally, we consider controlling for the local housing cost change rate relative to income change rate (see Model 3 in Table CC). We can see that young adults' personal income in 1999 is still significant. As Table CC shows, rent level variables come in with expected signs and significantly. Rent change variable comes in with expected sign but is insignificant while rate of housing cost to income change comes in with unexpected sign but is small and insignificant. Of course, such an attempt to tease out the influence of changes in housing cost and income is preliminary because the way we impute for local median housing cost and income is relatively crude (by using the 12 geographic areas). Therefore, additional work in this area based on better data with all income and housing cost information stored at individual case level would help illuminate the ways in which housing costs, housing cost changes, and housing cost change relative to income change could influence young adults' likelihood of living at parental homes.

Effect of Parental Resources

The limitations on parental information in the CPS data prevent us from investigating the effect of parental resources on young adults' living arrangements, for it is impossible to trace parental information after the youth has left home and lives independently. Therefore, we have to rely on the PSID data for our analysis on this subject. Figure 19 shows that both parental income and tenure had significant effect when measured alone. Those with higher parental income were more likely to live independently while those whose parents were homeowners were more likely to live at home, despite the fact that owners usually had higher incomes. This seemingly opposite trend is likely due to the difficulties of doubling up with parents when they do not own their houses, for landlords would usually oppose such living arrangements. Models 3 through 6 show that the effects of parental resources remain strong after controlling for personal income and other demographic factors.

Figure 19: Model Results from the 1993 PSID Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---------------------------|----------|----------|-----------|----------|----------|----------|
| Intercept | -0.97*** | -1.50*** | -0.51*** | 4.13*** | 2.70*** | 1.90*** |
| Parental Income | -0.06*** | | -0.07*** | -0.07*** | -0.04*** | -0.04*** |
| Parental Tenure | | 0.30** | 0.63*** | 0.55*** | 0.72*** | 0.77*** |
| Personal Income | | | -0.31*** | -0.31*** | -0.30*** | -0.29*** |
| Gender | | | | 0.81*** | 0.82*** | 0.82*** |
| Age | | | | -0.15*** | -0.14*** | -0.14*** |
| Marital Status | | | | -1.84*** | -2.04*** | -2.01*** |
| Black | | | | | 0.94*** | 0.95*** |
| Hispanic | | | | | 2.03*** | 1.95*** |
| Other Minorities | | | | | -1.34 | -1.46 |
| Less than High School | | | | | | 0.21 |
| Some College | | | | | | -0.07 |
| College & Graduate School | | | | | | 0.11 |
| Northeast | | | | | | 0.55* |
| South | | | | | | 0.36* |
| West | | | | | | 0.50* |
| Urban | | | | | | 0.34 |
| -2 Log Likelihood | 2422.04 | 2466.15 | 2187.79 | 1847.84 | 1672.48 | 1658.11 |
| Pseudo R-square | 2.10% | 0.32% | 11.57% | 25.31% | 32.40% | 32.98% |
| | *p<.05 | **p<.01 | ***p<.001 | | | |

Figure 20 shows our model results from using the linked 1984-1993 PSID data. One advantage of linking the 1984 and 1993 PSID is that in 1984 the PSID survey had a supplement section on household wealth and therefore we obtained information on the parent household wealth. When examined separately, both parental income and parental wealth had some significant effects, but parental tenure had no effect on young adults' living arrangement. When examined together, however, only parental income still had a weak effect. After controlling for personal income, only parental tenure was significant. As we controlled for more factors, particularly marital status, the effect of parental tenure became larger. This is because the vast majority of married young adults live independently regardless of their parental tenure; thus controlling for marital status makes the effect of parental tenure much stronger.

Figure 20: Model Results from the 1984-93 PSID Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 |
|---------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Intercept | -1.07*** | -1.27*** | -1.40*** | -1.24*** | -0.69*** | 1.27 | 1.30 | 0.71 |
| Parental Income | -0.05** | | | -0.04* | 0.0002 | 0.003 | 0.004 | 0.0002 |
| Parental Wealth | | -0.01* | | -0.005 | -0.003 | -0.002 | -0.002 | -0.002 |
| Parental Tenure | | | -0.03 | 0.27 | 0.37* | 0.71*** | 0.72*** | 0.86*** |
| Personal Income | | | | | -0.33*** | -0.32*** | -0.32*** | -0.30*** |
| Gender | | | | | | 0.64*** | 0.63*** | 0.61*** |
| Age | | | | | | -0.07* | -0.07* | -0.07* |
| Marital Status | | | | | | -4.00*** | -4.00*** | -3.95*** |
| Black | | | | | | | 0.08 | 0.23 |
| Hispanic | | | | | | | 0.34 | 0.23 |
| Other Minorities | | | | | | | -0.71 | -0.95 |
| Less than High School | | | | | | | | 0.33 |
| Some College | | | | | | | | 0.05 |
| College & Graduate School | | | | | | | | -0.01 |
| Northeast | | | | | | | | 0.68* |
| South | | | | | | | | 0.10 |
| West | | | | | | | | 0.44 |
| Urban | | | | | | | | -0.03 |
| -2 Log Likelihood | 1341.48 | 1342.12 | 1352.91 | 1335.50 | 1218.60 | 964.16 | 963.06 | 953.23 |
| Pseudo R-square | 0.85% | 0.80% | 0.00% | 1.29% | 9.93% | 28.74% | 28.82% | 29.54% |

*p<.05

**p<.01

***p<.001

The linked 1976-1993 PSID do not contain information on parental wealth, but patterns of parental income and tenure remain. That is, both had significant effects when examined separately, but only parental income matters when looking together. As personal income is controlled, none of them matters anymore. But as soon as marital status is controlled, parental tenure becomes significant (See Figure 21).

Figure 21: Model Results from the 1976-93 PSID Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|---------------------------|----------|----------|-----------|----------|----------|----------|----------|
| Intercept | -2.06*** | -2.16*** | -1.99*** | -1.51*** | 2.81*** | 2.73*** | 2.58*** |
| Parental Income | -0.10** | | -0.09** | -0.02 | 0.03 | 0.05 | 0.04 |
| Parental Tenure | | -0.31** | -0.18 | -0.02 | 0.31* | 0.35* | 0.37* |
| Personal Income | | | | -0.29*** | -0.28*** | -0.27*** | -0.27*** |
| Gender | | | | | 0.93*** | 0.93*** | 0.95*** |
| Age | | | | | -0.15*** | -0.16*** | -0.15*** |
| Marital Status | | | | | -3.68*** | -3.62*** | -3.65*** |
| Black | | | | | | 0.28 | 0.33 |
| Hispanic | | | | | | 0.46 | 0.53 |
| Other Minorities | | | | | | -0.63 | -0.69 |
| Less than High School | | | | | | | -0.05 |
| Some College | | | | | | | 0.03 |
| College & Graduate School | | | | | | | 0.18 |
| Northeast | | | | | | | 0.44 |
| South | | | | | | | 0.20 |
| West | | | | | | | 0.09 |
| Urban | | | | | | | -0.11 |
| -2 Log Likelihood | 2104.61 | 2110.40 | 2102.83 | 1968.74 | 1477.49 | 1472.88 | 1468.09 |
| Pseudo R-square | 0.57% | 0.29% | 0.65% | 6.99% | 30.19% | 30.41% | 30.64% |
| | *p<.05 | **p<.01 | ***p<.001 | | | | |

While parental tenure has a definite impact on young adults' living arrangement, our model results on parental income and wealth show weaker evidence of their influence. The effect of parental income is only significant in the 1993 PSID model. This is not surprising, for previous studies also yield inconsistent findings. While we feel

uncertain about whether young adults of higher-income parents have a higher probability of living independently, we are quite certain now that owner households have more opportunities to allow adult children to stay at home.

Effect of Race

Previous studies have found that minority young adults are more likely to live in parental homes than their white counterparts. Our analysis only allows us to concur, but with reservations. Reasons for our hesitation are threefold. First, racial differences between whites and minorities did not always appear in our models using different data sets. Before controlling for anything, the CPS data shows that all minorities are more likely than whites to live in parental homes, while the 1993 PSID data only shows significant effects of blacks and Hispanics. Figure 22 and Figure 23 demonstrate our logistical model results from the two different samples.

Figure 22: Model Results from the CPS Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---------------------------|----------|----------|-----------|----------|----------|
| Intercept | -2.39*** | -2.78*** | -2.67*** | 1.07** | 0.47 |
| Black | 0.50*** | 0.42*** | 0.42*** | 0.41*** | -0.06 |
| Hispanic | 0.14* | -0.11 | -0.02 | -0.05 | -0.07 |
| Other Minorities | 0.31** | 0.18 | 0.20 | 0.18 | 0.05 |
| Personal Income | | -0.09*** | -0.09*** | -0.11*** | -0.11*** |
| Area Rent | | 0.18*** | 0.18*** | 0.19*** | 0.16*** |
| Less than High School | | | -0.45*** | -0.48*** | -0.52*** |
| Some College | | | -0.04 | -0.02 | -0.01 |
| College & Graduate School | | | -0.20* | -0.14 | -0.18* |
| Gender | | | | 0.58*** | 0.31*** |
| Age | | | | -0.14*** | -0.08*** |
| Marital Status | | | | | -3.04*** |
| -2 Log Likelihood | 9219.08 | 9027.53 | 8999.85 | 8712.56 | 7293.43 |
| Pseudo R-square | 0.38% | 2.45% | 2.75% | 5.86% | 21.19% |
| *p<.05 | | **p<.01 | ***p<.001 | | |

Figure 23: Model Results from the 1993 PSID Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---------------------------|----------|----------|-----------|----------|----------|----------|
| Intercept | -2.13*** | -1.29*** | -1.57*** | -1.70*** | 2.61*** | 1.90** |
| Black | 1.04*** | 0.93*** | 0.96*** | 0.95*** | 0.94*** | 0.95*** |
| Hispanic | 1.97*** | 1.92*** | 1.91*** | 1.88*** | 2.02*** | 1.95*** |
| Other Minorities | -0.96 | -1.21 | -1.10 | -1.17 | -1.36 | -1.46 |
| Personal Income | | -0.30*** | -0.30*** | -0.27*** | -0.29*** | -0.29*** |
| Parental Income | | | -0.04*** | -0.04*** | -0.04*** | -0.04*** |
| Parental Tenure | | | 0.78*** | 0.78*** | 0.72*** | 0.77*** |
| Less than High School | | | | 0.45*** | 0.20 | 0.21 |
| Some College | | | | -0.22 | -0.04 | -0.07 |
| College & Graduate School | | | | 0.04 | 0.11 | 0.11 |
| Gender | | | | | 0.81*** | 0.82*** |
| Age | | | | | -0.14*** | -0.14*** |
| Marital Status | | | | | -2.02*** | -2.01*** |
| Northeast | | | | | | 0.55* |
| South | | | | | | 0.36* |
| West | | | | | | 0.50* |
| Urban | | | | | | 0.34 |
| -2 Log Likelihood | 2233.19 | 2048.34 | 1999.28 | 1982.02 | 1670.08 | 1658.11 |
| Pseudo R-square | 9.73% | 17.20% | 19.19% | 19.88% | 32.49% | 32.98% |
| | *p<.05 | **p<.01 | ***p<.001 | | | |

Second, after controlling for personal income and area rent in the CPS data, only black and white difference remains statistically significant. The 1993 PSID data indicates, however, that both blacks and Hispanics are significantly more likely to live with parents, and such racial effects remain significant after controlling for all other factors in our models.

Third, our models based on the 1984-1993 and 1976-1993 PSID data are not comparable to the above discussion. This is because in earlier PSID data, ethnicity origin was not a separate variable and therefore the white, black, and other race categories are not exclusively non-Hispanic. Nevertheless, as Appendix D shows, blacks and Hispanics had significant effects when examined alone, but after controlling for some demographic and economic factors, such effects eventually disappeared.

Our models through different datasets prove that racial difference may not be as large as previous studies claimed. Black and white difference seems to be more significant, and the effect of being Hispanic is the second. In many of the cases, our models attribute the detectable racial effects to some compound influence of other factors such as economic, demographic and geographic variations.

Other Factors

Previous studies have also found effects of gender and family structure on young adults' living arrangement. Gender difference is quite obvious, and the difficulty lies in how to explain the difference. Family structure is a more complicated issue, and many researchers have already done sophisticated analyses. In the following space, we will just briefly report our model results.

Gender

Figure 24 displays the gender difference in the probability of living with parents based on our models using different datasets.

Figure 24: Estimated Probability of Living at Parental Homes by Gender

| | Probability of Living at Parental Home | | | |
|--------|--|------------|------------|------------|
| | CPS 2001 | PSID 93-93 | PSID 84-93 | PSID 76-93 |
| Male | 0.22 | 0.25 | 0.40 | 0.24 |
| Female | 0.17 | 0.13 | 0.27 | 0.11 |

Note: These estimates are for unmarried 30-year-old whites living in urban areas in the Northeast, with high school diploma and owner parents, with personal income, area rent, and parental income and wealth set to sample means.

While other things matter, such as personal income and marital status, the effect of gender remains statistically significant after controlling for those factors. Based on CPS 2001 data, other things being equal, the fitted odds of males living in parental homes vs. living independently are 1.4 times the fitted odds for females. The results for the PSID 93, PSID 84-93, and PSID 76-93 are 2.3 times, 1.8 times, and 2.6 times,

respectively. Such a gender line suggests it may have something to do with patriarchy. For convenience's sake, we display the results of our Model 5 in Figure 15 again here and rearrange them in Figure 25.

Figure 25: Logistic Regression Results from the 2001 CPS Data

| Variables | Model 5 |
|---------------------------|-----------|
| Intercept | 0.47 |
| Gender | 0.31*** |
| Personal Income | -0.11*** |
| Area Rent | 0.16*** |
| Age | -0.08*** |
| Marital Status | -3.04*** |
| Black | -0.06 |
| Hispanic | -0.07 |
| Other Minorities | 0.05 |
| Less than High School | -0.52*** |
| Some College | -0.01 |
| College & Graduate School | -0.18* |
| -2 Log Likelihood | 7293.43 |
| Pseudo R-square | 21.19% |
| *p<.05 | **p<.01 |
| | ***p<.001 |

Family Structure

Previous studies have identified three ways in which family structure could affect young adults' living arrangement: the marital status of the young adults, the marital status of the parents of the young adults, and whether the young adults have their own children. Our datasets and methodology are not sophisticated enough for us to pursue an investigation in the last two areas. Such effects as number of children, siblings, and parental marital status require much more complicated operations.

We certainly agree with earlier studies that young adults' marital status is a critical factor in determining their living arrangement. Based on CPS 2001 data, we estimate that the odds of an unmarried young adult living in their parent's home versus living independently are 20.9 times the odds for a married youth. The results for the PSID

93, PSID 84-93, and PSID 76-93 are 7.5 times, 51.9 times, and 38.5 times, respectively. Figure 26 displays our estimated probabilities of living at parental homes for 30-year-old white males living in a Northeastern urban area, with high school diploma and owner parents, with personal income, area rent, and parental income and wealth set to sample means. As shown in the figure, other things being equal, an unmarried man has a 22 percent chance of living with his parents, while a married man has only a one percent chance of living with his parents. However, the difference in marital status could not affect the housing market as directly as changes in personal income, for marriage would only create more pressure to live away from parents, but without financial means such pressure would not become a true market demand.

Figure 26: Estimated Probability of Living at Parental Homes by Marital Status

| | Probability of Living at Parental Home | | | |
|-----------|--|------------|------------|------------|
| | CPS 2001 | PSID 93-93 | PSID 84-93 | PSID 76-93 |
| Married | 0.01 | 0.04 | 0.01 | 0.01 |
| Unmarried | 0.22 | 0.25 | 0.40 | 0.24 |

Note: These estimates are for 30-year-old white males living in urban areas in the Northeast, with high school diploma and owner parents, with personal income, area rent, and parental income and wealth set to sample means.

VI. Conclusions

We have used both the CPS and PSID data in this paper and have actually constructed three separate datasets from the PSID data to explain why millions of young adults (ages 25-34) still live in their parents' homes. We choose to use both data and four different datasets before we reach our conclusions because we understand the danger of data manipulation. As Masnick (1996) pointed out, "it is possible to exaggerate a given trend by choosing a time frame, or data set, or population universe, or definition of living arrangement that is not quite honest in what it contains or what it leaves out" (p.28). With such caution, our analysis still confirms our beliefs that personal income is one of the most important factors explaining the living arrangements of young adults (ages 25-34).

Controlling for parental resources and selected demographic factors, those with lower personal income are more likely to live in parents' homes.

We have also identified that the long-term trends in such co-residence corresponds to the income distribution of these young people. As more youths are income-constrained, more of them have to stay in their parents' homes. The overall trend during the past four decades is a U-shaped pattern peaked in the mid 1990s with a slight decline in the end. Such a U-shaped pattern is in line with the overall economic conditions in income distribution such as family income inequality, low-wage share of total employment, inequality in wages and salaries, and the number of persons below the poverty level. As millions of young adults are income-constrained, the only available living arrangement is to stay in their parents' homes.

Other factors such as culture and marriage do matter, but parental resources and racial differences seem to have less impact than many previous studies have found. While parental wealth and income are influential, they are not statistically significant when other factors such as personal income are considered. In other words, their impact is not direct but could be indirect. For example, low-income parents may cause children to have less education and therefore lower personal income. The same is true with racial differences. After controlling for personal income, parental resources, and selected demographic factors, only the 1993 PSID data show significantly more Black and Hispanic young adults (ages 25-34) lived with parents compared with their white counterparts. In all other datasets we used, minorities do not significantly differ from whites after controlling for these factors.

There has been a slight decline in the share of young adults (ages 25-34) living with parents since the mid 1990s, as shown in the CPS data. This raises a question about housing demand. During the latter half of the 1990s, the total number of renter households actually decreased a little (Joint Center for Housing Studies 2001). This indicates that while some formerly income-constrained young adults were relieved to be living independently, they may have only ended up in co-residence with people other than parents. How they respond to future economic situations such as their personal income and rent will have an impact on the future demand in housing. Further studies on peer co-residence and single-person households are necessary before any meaningful

knowledge on future housing demand can be obtained. At least as important as the information on peer co-residence, the combined effect of changes in income and rent or housing cost also deserves further research.

Appendix A

Sample Characteristics from the Linked 1984-1993 PSID and 1976-1993 PSID Data

**Table AA: Sample Characteristics of Young Adults (Ages 25 to 34 in 1993),
1984-1993 PSID**

| Variable | Variable Definition | Unweighted Mean (n=1,444) | Weighted Mean (N=30,891) |
|--------------------|---|---------------------------------|--------------------------------|
| Living Arrangement | Dummy Variable =1 if living at parents' home | 0.20 | 0.15 |
| Personal Income | Annual personal total income in 1993 | 18,864.87 | 22,765.49 |
| Parental Income | Annual parental income in 1984 | 34,039.11 | 43,226.15 |
| Parental Wealth | Annual parental wealth in 1984 | 108,953.06 | 193,129.33 |
| Parental Tenure | Dummy Variable=1 if owner in 1984 | 0.71 | 0.80 |
| Gender | Dummy Variable=1 if male | 0.54 | 0.55 |
| Marital Status | Dummy Variable=1 if married | 0.39 | 0.48 |
| Age | Young adults' age | 28.55 | 28.43 |
| <u>Race</u> | | | |
| White | Dummy Variable=1 if non-Hispanic white | 0.50 | 0.80 |
| Black | Dummy Variable=1 if non-Hispanic black | 0.46 | 0.17 |
| Hispanic | Dummy Variable=1 if Hispanic | 0.03 | 0.02 |
| Other | Dummy Variable=1 if Asian and others | 0.01 | 0.01 |
| <u>Education</u> | | | |
| Less High | Dummy Variable=1 if education is less than high school | 0.18 | 0.12 |
| High School | Dummy Variable=1 if education is high school diploma | 0.41 | 0.35 |
| Some College | Dummy Variable=1 if education is some years in college | 0.23 | 0.25 |
| College & Up | Dummy Variable=1 if education is bachelor's degree and up | 0.18 | 0.28 |
| <u>Geography</u> | | | |
| Urban | Dummy Variable=1 if in area >20,000 people | 0.86 | 0.83 |
| Northeast | Dummy Variable=1 if in Northeast | 0.17 | 0.29 |
| Midwest | Dummy Variable=1 if in Midwest | 0.22 | 0.26 |
| South | Dummy Variable=1 if in South | 0.47 | 0.31 |
| West | Dummy Variable=1 if in West | 0.14 | 0.14 |

Data Source: Linked 1984-1993 PSID.

Table AB: Comparison of Young Adults (Ages 25 to 34) Living with Parents and Living Independently by Selected Characteristics, 1984-1993 PSID

| Characteristics | Living with Parents | Not Living with Parents | Living with Parents | Not Living with Parents |
|--------------------------------|---------------------|-------------------------|---------------------|-------------------------|
| | Unweighted | | Weighted | |
| Median Personal Income in 1993 | 4,476 | 17,175 | 10,400 | 21,100 |
| Median Parental Income in 1984 | 25,677 | 28,897 | 32,000 | 38,408 |
| Median Parental Wealth in 1984 | 26,800 | 31,890 | 55,233 | 68,050 |
| Median Age | 28 | 28 | 27 | 28 |
| <u>Parental Tenure, 1984</u> | | | | |
| Owner | 70% | 71% | 80% | 80% |
| Renter | 30% | 29% | 20% | 20% |
| | 100% | 100% | 100% | 100% |
| <u>Gender</u> | | | | |
| Male | 66% | 51% | 70% | 53% |
| Female | 34% | 49% | 30% | 47% |
| | 100% | 100% | 100% | 100% |
| <u>Marital Status</u> | | | | |
| Married | 2% | 48% | 2% | 56% |
| Non-Married | 98% | 52% | 98% | 44% |
| | 100% | 100% | 100% | 100% |
| <u>Race</u> | | | | |
| White | 36% | 54% | 71% | 82% |
| Black | 59% | 42% | 27% | 15% |
| Hispanic | 5% | 3% | 2% | 2% |
| Other | 0 | 1% | 0 | 1% |
| | 100% | 100% | 100% | 100% |
| <u>Education</u> | | | | |
| Less High | 33% | 15% | 24% | 11% |
| High School | 41% | 40% | 43% | 33% |
| Some College | 16% | 25% | 19% | 26% |
| College & Up | 10% | 20% | 14% | 30% |
| | 100% | 100% | 100% | 100% |

Data Source: Linked 1984-1993 PSID.

**Table AC: Sample Characteristics of Young Adults (Ages 25 to 34 in 1993),
1976-1993 PSID**

| Variable | Variable Definition | Unweighted Mean (n=3,816) | Weighted Mean (N=51,611) |
|-----------------------|---|------------------------------|-----------------------------|
| Living Arrangement | Dummy Variable =1 if living at parent home | 0.09 | 0.09 |
| Personal Income, 1993 | Annual personal total income in 1993 | 18,681.46 | 22,408.93 |
| Parental Income, 1976 | Annual parental income in 1976 | 15,909.16 | 19,477.53 |
| Parental Tenure, 1976 | Dummy Variable=1 if owner in 1976 | 0.69 | 0.78 |
| Gender | Dummy Variable=1 if male | 0.47 | 0.49 |
| Marital Status | Dummy Variable=1 if married | 0.57 | 0.54 |
| Age | Young Adults' age | 29.86 | 29.75 |
| <u>Race</u> | | | |
| White | Dummy Variable=1 if non-Hispanic white | 0.57 | 0.81 |
| Black | Dummy Variable=1 if non-Hispanic black | 0.39 | 0.17 |
| Hispanic | Dummy Variable=1 if Hispanic | 0.03 | 0.02 |
| Other | Dummy Variable=1 if Asian and others | 0.01 | 0 |
| <u>Education</u> | | | |
| Less High | Dummy Variable=1 if education is less than high school | 0.19 | 0.14 |
| High School | Dummy Variable=1 if education is high school diploma | 0.42 | 0.38 |
| Some College | Dummy Variable=1 if education is some years in college | 0.23 | 0.24 |
| College & Up | Dummy Variable=1 if education is bachelor's degree and up | 0.16 | 0.22 |
| <u>Geography</u> | | | |
| Urban | Dummy Variable=1 if in area >20,000 people | 0.82 | 0.81 |
| Northeast | Dummy Variable=1 if in Northeast | 0.15 | 0.24 |
| Midwest | Dummy Variable=1 if in Midwest | 0.23 | 0.28 |
| South | Dummy Variable=1 if in South | 0.47 | 0.33 |
| West | Dummy Variable=1 if in West | 0.15 | 0.15 |

Data Source: Linked 1976-1993 PSID.

Table AD: Comparison of Young Adults (Ages 25 to 34) Living with Parents and Living Independently by Selected Characteristics, 1976-1993 PSID

| Characteristics | Living with | Not Living | Living with | Not Living |
|--------------------------------|-------------|--------------|-------------|--------------|
| | Parents | with Parents | Parents | with Parents |
| | Unweighted | | Weighted | |
| Median Personal Income in 1993 | 4,680 | 16,806 | 11,200 | 20,000 |
| Median Parental Income in 1976 | 12,184 | 13,520 | 14,594 | 17,045 |
| Median Age | 28 | 30 | 27 | 30 |
| <u>Parental Tenure, 1976</u> | | | | |
| Owner | 62% | 70% | 75% | 79% |
| Renter | 38% | 30% | 25% | 21% |
| | 100% | 100% | 100% | 100% |
| <u>Gender</u> | | | | |
| Male | 66% | 45% | 70% | 47% |
| Female | 34% | 55% | 30% | 53% |
| | 100% | 100% | 100% | 100% |
| <u>Marital Status</u> | | | | |
| Married | 3% | 61% | 2% | 60% |
| Non-Married | 97% | 39% | 98% | 40% |
| | 100% | 100% | 100% | 100% |
| <u>Race</u> | | | | |
| White | 37% | 59% | 70% | 82% |
| Black | 58% | 37% | 28% | 15% |
| Hispanic | 04% | 3% | 2% | 2% |
| Other | 1% | 1% | 0 | 1% |
| | 100% | 100% | 100% | 100% |
| <u>Education</u> | | | | |
| Less High | 36% | 17% | 25% | 13% |
| High School | 40% | 42% | 43% | 39% |
| Some College | 15% | 24% | 19% | 25% |
| College & Up | 9% | 17% | 13% | 23% |
| | 100% | 100% | 100% | 100% |

Data Source: Linked 1976-1993 PSID.

Appendix B

Model Results from the Linked 1984-1993 PSID and 1976-1993 PSID Data on Personal Income

Table BA: Model Results from the 1984-93 PSID data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 6 | Model 7 |
|---------------------------|----------|-----------|----------|----------|----------|----------|
| Intercept | -0.49*** | -0.69*** | 1.27 | 1.30 | 1.10 | 0.71 |
| Personal Income | -0.32*** | -0.33*** | -0.32*** | -0.32*** | -0.30*** | -0.30*** |
| Parental Income | | 0.0002 | 0.003 | 0.004 | 0.005 | 0.0002 |
| Parental Wealth | | -0.003 | -0.002 | -0.002 | -0.002 | -0.002 |
| Parental Tenure | | 0.37* | 0.71*** | 0.72*** | 0.76*** | 0.86*** |
| Gender | | | 0.64*** | 0.63*** | 0.60*** | 0.61*** |
| Age | | | -0.07* | -0.07* | -0.07* | -0.07* |
| Marital Status | | | -4.0*** | -3.99*** | -3.98*** | -3.95*** |
| Black | | | | 0.08 | 0.08 | 0.23 |
| Hispanic | | | | 0.34 | 0.28 | 0.23 |
| Other Minorities | | | | -0.71 | -0.80 | -0.95 |
| Less than High School | | | | | 0.29 | 0.33 |
| Some College | | | | | 0.08 | 0.05 |
| College & Graduate School | | | | | -0.02 | -0.01 |
| Northeast | | | | | | 0.68* |
| South | | | | | | 0.10 |
| West | | | | | | 0.44 |
| Urban | | | | | | -0.03 |
| -2 Log Likelihood | 1225.40 | 1218.60 | 964.16 | 963.06 | 961.00 | 953.23 |
| Pseudo R-square | 9.43% | 9.93% | 28.74% | 28.82% | 28.97% | 29.54% |
| *p<.05 | **p<.01 | ***p<.001 | | | | |

Table BB: Differences that Personal Income Makes Based on Comparable Social Factors, 1984-1993 PSID

| Personal Income | Probability of Living at Parental Home |
|-----------------|--|
| 5,000 | 0.59 |
| 10,000 | 0.52 |
| 15,000 | 0.44 |
| 20,000 | 0.37 |
| 25,000 | 0.30 |
| 30,000 | 0.24 |
| 35,000 | 0.19 |
| 40,000 | 0.15 |
| 45,000 | 0.11 |
| 50,000 | 0.09 |
| 55,000 | 0.06 |
| 60,000 | 0.05 |

Data Source: 1984-1993 PSID data.

Note: The estimates are for unmarried 30-year-old white males with high school education living in urban areas in Northeast and their parental income equal to sample means and their parents were owners in 1984.

Table BC: Model Results from the 1976-93 PSID Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---------------------------|----------|----------|-----------|----------|----------|----------|
| Intercept | -1.58*** | -1.51*** | 2.81*** | 2.73*** | 2.74*** | 2.58*** |
| Personal Income | -0.29*** | -0.29*** | -0.28*** | -0.27*** | -0.27*** | -0.27*** |
| Parental Income | | -0.02 | 0.03 | 0.05 | 0.04 | 0.04 |
| Parental Tenure | | -0.02 | 0.31* | 0.35* | 0.35* | 0.37* |
| Gender | | | 0.93*** | 0.93*** | 0.95*** | 0.95*** |
| Age | | | -0.15*** | -0.16*** | -0.16*** | -0.15*** |
| Marital Status | | | -3.68*** | -3.62*** | -3.64*** | -3.65*** |
| Black | | | | 0.28 | 0.29 | 0.33 |
| Hispanic | | | | 0.46 | 0.46 | 0.53 |
| Other Minorities | | | | -0.63 | -0.63 | -0.69 |
| Less than High School | | | | | -0.06 | -0.05 |
| Some College | | | | | 0.02 | 0.03 |
| College & Graduate School | | | | | 0.18 | 0.18 |
| Northeast | | | | | | 0.44 |
| South | | | | | | 0.20 |
| West | | | | | | 0.09 |
| Urban | | | | | | -0.11 |
| -2 Log Likelihood | 1969.49 | 1968.74 | 1477.49 | 1472.88 | 1472.12 | 1468.09 |
| Pseudo R-square | 6.95% | 6.99% | 30.19% | 30.41% | 30.45% | 30.64% |
| *p<.05 | | **p<.01 | ***p<.001 | | | |

Table BD: Differences that Personal Income Makes Based on Comparable Social Factors, 1976-1993 PSID

| Personal Income | Probability of Living at Parental Home |
|-----------------|--|
| 5,000 | 0.40 |
| 10,000 | 0.34 |
| 15,000 | 0.28 |
| 20,000 | 0.23 |
| 25,000 | 0.18 |
| 30,000 | 0.15 |
| 35,000 | 0.11 |
| 40,000 | 0.09 |
| 45,000 | 0.07 |
| 50,000 | 0.05 |
| 55,000 | 0.04 |
| 60,000 | 0.03 |

Data Source: 1976-1993 PSID data.

Note: The estimates are for unmarried 30-year-old white male with high school diploma with parental income set to sample means, living in urban areas in Northeast, and parents were owners in 1976.

Appendix C

Sample Characteristics and Model Results of the AHS data

Table CA: Sample Characteristics of Young Adults (Ages 25 to 34) in 1999

| Variable | Variable Definition | Unweighted Mean (n=16,311) | Weighted Mean (N=37.3 million) |
|--------------------------|---|----------------------------------|--------------------------------------|
| Living Arrangement | Dummy Variable =1 if living at parental home | 0.11 | 0.10 |
| Personal Income | Annual personal total income | 24042.35 | 23954.89 |
| Income Change Rate | Percent of salary change from 1997 to 1999 | 16.12 | 16.08 |
| Housing Cost Change Rate | Percent of housing cost change from 1997 to 1999 | 3.37 | 3.30 |
| Gender | Dummy Variable=1 if male | 0.48 | 0.48 |
| Marital Status | Dummy Variable=1 if married | 0.54 | 0.54 |
| Age | Young adults' age | 29.63 | 29.64 |
| <u>Race</u> | | | |
| Non-Hispanic White | Dummy Variable=1 if non-Hispanic white | 0.59 | 0.67 |
| Non-Hispanic Black | Dummy Variable=1 if non-Hispanic black | 0.17 | 0.13 |
| Hispanic | Dummy Variable=1 if Hispanic | 0.17 | 0.14 |
| Other | Dummy Variable=1 if Asian and others | 0.07 | 0.06 |
| <u>Education</u> | | | |
| Less High | Dummy Variable=1 if education is less than high school | 0.14 | 0.13 |
| High School | Dummy Variable=1 if education is high school diploma | 0.27 | 0.29 |
| Some College | Dummy Variable=1 if education is some years in college | 0.30 | 0.30 |
| College & Up | Dummy Variable=1 if education is bachelor's degree and up | 0.29 | 0.28 |

Data Source: AHS1999

Table CB: Comparison of Young Adults (Ages 25 to 34) Living with Parents and Living Independently by Selected Characteristics

| Characteristics | Living with Parents | Not Living with Parents | Living with Parents | Not Living with Parents |
|---------------------------------|---------------------|-------------------------|---------------------|-------------------------|
| | Unweighted | | Weighted | |
| Median Personal Income | 13,000 | 20,800 | 13,000 | 21,000 |
| Median Income Change Rate | 16 | 16 | 16 | 16 |
| Median Housing Cost Change Rate | 4 | 4 | 4 | 4 |
| Median Age | 28 | 30 | 28 | 30 |
| <u>Gender</u> | | | | |
| Male | 56% | 47% | 56% | 47% |
| Female | 44% | 53% | 44% | 53% |
| | 100% | 100% | 100% | 100% |
| <u>Marital Status</u> | | | | |
| Married | 5% | 60% | 5% | 59% |
| Non-Married | 95% | 40% | 95% | 41% |
| | 100% | 100% | 100% | 100% |
| <u>Race</u> | | | | |
| Non-Hispanic White | 55% | 65% | 57% | 68% |
| Non-Hispanic Black | 19% | 11% | 20% | 12% |
| Hispanic | 17% | 17% | 15% | 14% |
| Other | 9% | 7% | 8% | 6% |
| | 100% | 100% | 100% | 100% |
| <u>Education</u> | | | | |
| Less High | 14% | 14% | 14% | 13% |
| High School | 31% | 28% | 32% | 28% |
| Some College | 33% | 29% | 33% | 30% |
| College & Up | 22% | 29% | 21% | 29% |
| | 100% | 100% | 100% | 100% |

Data Source: AHS 1999.

Table CC: Model results from 1999 AHS data

| Variables | Model 1 | Model 2 | Model 3 |
|--|----------|----------|----------|
| Intercept | 1.28*** | 1.81*** | 1.78*** |
| Personal Income 1999 | -0.10*** | -0.10*** | -0.10*** |
| Area Median Rent 1999 | 0.10*** | -- | -- |
| Area Median Rent 1997 | -- | -0.09*** | -- |
| Area Median Rent Change 1997-99 | -- | 0.81 | -- |
| Area Median Housing Cost Change Rate Relative to Income Change Rate | -- | -- | -0.20 |
| Gender | 0.35*** | 0.35*** | 0.35*** |
| Age | -0.09*** | -0.09*** | -0.09*** |
| Marital Status | -3.16*** | -3.19*** | -3.18*** |
| Black | 0.25*** | 0.25*** | 0.23** |
| Hispanic | -0.02 | 0.10 | 0.04 |
| Other Minorities | 0.18 | 0.29** | 0.23* |
| Less than High School | -0.32** | -0.32*** | -0.32*** |
| Some College | 0.00 | 0.02 | 0.01 |
| College & Graduate School | -0.29*** | -0.24** | -0.26*** |
| -2 Log Likelihood | 8779.07 | 8875.38 | 8898.21 |
| Pseudo R-square | 24.48% | 23.66% | 23.46% |

*p<.05

**p<.01

***p<.001

Appendix D

Model Results from the Linked 1984-1993 PSID and 1976-1993 PSID Data on Effects of Race

Table DA: Model Results from the Linked 1984-1993 PSID Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---------------------------|----------|----------|-----------|----------|----------|----------|
| Intercept | -1.78*** | -0.70*** | -1.08*** | -1.32*** | 1.10 | 0.71 |
| Black | 0.73*** | 0.29* | 0.40* | 0.40* | 0.08 | 0.23 |
| Hispanic | 0.81* | 0.50 | 0.56 | 0.47 | 0.28 | 0.23 |
| Other Minorities | -0.30 | -0.43 | -0.40 | -0.49 | -0.80 | -0.95 |
| Personal Income | | -0.31*** | -0.31*** | -0.28*** | -0.30*** | -0.30*** |
| Parental Income | | | 0.01 | 0.01 | 0.005 | 0.0002 |
| Parental Wealth | | | -0.003 | -0.002 | -0.002 | -0.002 |
| Parental Tenure | | | 0.44** | 0.52** | 0.76*** | 0.86*** |
| Less than High School | | | | 0.56*** | 0.29 | 0.33 |
| Some College | | | | -0.14 | 0.08 | 0.05 |
| College & Graduate School | | | | -0.10 | -0.02 | -0.01 |
| Gender | | | | | 0.60*** | 0.61*** |
| Age | | | | | -0.07* | -0.07* |
| Marital Status | | | | | -3.98*** | -3.95*** |
| Northeast | | | | | | 0.68* |
| South | | | | | | 0.10 |
| West | | | | | | 0.44 |
| Urban | | | | | | -0.03 |
| -2 Log Likelihood | 1323.73 | 1220.46 | 1211.56 | 1199.47 | 961.00 | 953.23 |
| Pseudo R-square | 2.16% | 9.79% | 10.45% | 11.34% | 28.97% | 29.54% |
| | *p<.05 | **p<.01 | ***p<.001 | | | |

Table DB: Model Results from the Linked 1976-93 PSID Data

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---------------------------|----------|----------|----------|----------|----------|-----------|
| Intercept | -2.83*** | -1.97*** | -2.16*** | -2.35*** | 2.74*** | 2.58*** |
| Black | 0.90*** | 0.63*** | 0.71*** | 0.70*** | 0.29 | 0.33 |
| Hispanic | 0.84** | 0.67* | 0.69* | 0.64* | 0.46 | 0.53 |
| Other Minorities | -0.47 | -0.47 | -0.45 | -0.52 | -0.63 | -0.69 |
| Personal Income | | -0.27*** | -0.27*** | -0.25*** | -0.27*** | -0.27*** |
| Parental Income | | | 0.03 | 0.04 | 0.04 | 0.04 |
| Parental Tenure | | | 0.09 | 0.13 | 0.35* | 0.37* |
| Less than High School | | | | 0.46*** | -0.06 | -0.05 |
| Some College | | | | -0.17 | 0.02 | 0.03 |
| College & Graduate School | | | | 0.03 | 0.18 | 0.18 |
| Gender | | | | | 0.95*** | 0.95*** |
| Age | | | | | -0.16*** | -0.15*** |
| Marital Status | | | | | -3.64*** | -3.65*** |
| Northeast | | | | | | 0.44 |
| South | | | | | | 0.20 |
| West | | | | | | 0.09 |
| Urban | | | | | | -0.11 |
| -2 Log Likelihood | 2059.55 | 1942.74 | 1940.80 | 1926.94 | 1472.12 | 1468.09 |
| Pseudo R-square | 2.69% | 8.21% | 8.31% | 8.96% | 30.45% | 30.64% |
| *p<.05 | | **p<.01 | | | | ***p<.001 |

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