Group living decisions as youths transition to adulthood

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Abstract. This study follows teens through young adulthood as they transition to independent living. We focus on a little studied issue: why some youths live in groups rather than alone or with parents. This choice is important because the size of the group has a substantial impact on the demand for dwelling units; the more youths per dwelling the lower is aggregate demand and the greater is population density. Our study also adds to the knowledge of which factors influence youths' choice of destination as they leave the parental home. The empirical testing uses a discrete hazard model within a multinomial logit framework to allow for more than one possible state transition. We find that economic variables have little impact on the decision of whether to exit to a large versus a small group, while socio-demographic variables matter. We also test a new push-pull hypothesis and find that the pull of economic variables on the probability of exiting the parental home increases as youths reach their mid to late twenties.

1. Introduction

Interest in the process of youths leaving the parental home and moving to an independent living arrangement continues to be high. Recent studies about

youths' tendency to leave home include analyses of the impact of the cost of shelter and potential earnings (Haurin et al. 1993, 1994; Bourassa et al. 1994; Whittington and Peters 1996; Ermisch and Di Salvo 1997; Johnson and DaVanzo 1998; Ermisch 1999), the impact of family structure (Aquilino 1991; Goldscheider and Goldscheider 1998), the impact of gender, religion, and ethnic differences (Goldscheider and DaVanzo 1989; Buck and Scott 1993), and the impact of parental and youths' normative expectations about home-leaving (Goldscheider and Goldscheider 1993b). A fairly comprehensive portrait of the sociological, psychological, demographic, and economic explanatory factors is emerging.

Understanding home-leaving is key to modeling household formation. Household formation impacts aggregate housing demand, population density, fertility, labor force mobility, and the demand for public services. We argue that while the substantial attention paid to the timing of youths' departure from the parental home is appropriate, careful study of all destination possibilities is equally important as is understanding whether the magnitude of an explanatory factor's influence differs by respondent age.

There is some controversy about the appropriate categorization of exit types. Early studies focused on a dichotomous choice: exit or remain in the parental home. More recently, multiple exit "destinations" have been considered where a destination is defined as a type of living arrangement outside the parental home. Examples include exiting to marry, live alone, live with a relative, or live in a group. Studies have attempted to sort out the impact of explanatory factors on the probabilities of exiting to each of the destination categories. However, the choice of destination categories has often been dictated by data limitations or been the result of an apparently arbitrary choice. When refocusing research from the origin (parental home) of a youth's transition to the destination, a more systematic approach to study alternative configurations of destinations should be employed. We recognize that the extent of disaggregation of destinations is limited by sample size; the more categories, the smaller the number of exits to a particular category. If destinations are highly disaggregated, empirical analysis becomes more difficult and inferences of relationships are harder to draw with confidence. However, when there is a compelling theoretical reason for making a distinction among destination types, exits should be disaggregated by type.[1]

We focus on the question of which social, demographic, and economic factors influence the tendency of a youth to exit to a small group living arrangement compared with a large group. Although exiting to a group has been included as a destination category, to our knowledge, no studies have distinguished the size of grouped arrangements. From a theoretical perspective, we conduct new tests of factors hypothesized to influence destination choice, focusing on a comparison of economic with socio-demographic variables. The goal of our analysis is to determine whether a finer differentiation of exits to groups of small or large size is needed in the analysis of youths' home-leaving.

Failure to disaggregate destination categories could lead to the statistical problem of aggregation bias. For example, an explanatory variable such as the cost of shelter could negatively influence the tendency to exit to a small group, but positively influence the tendency to exit to a large group. If exits to small and large groups are combined into a single category, it is possible that the resulting estimation would indicate that this explanatory variable had

no impact on the tendency to exit to a group. Inappropriate aggregation of various group sizes into a single category may lead to biased statistical inferences.

Weighting our sample data allows us to describe U.S. patterns in youths' tendencies to exit to small compared with large groups where a small group is defined as the respondent and one other adult other than spouse or opposite sex partner. The percentage of youths selecting to exit to small groups is 18 and the percentage exiting to large groups is 15. Clearly, group living is an important destination when exiting the parental home. Further, the near equality of the two percentages suggests that both categories are important.

2. Literature

2.1. Types of transitions

Groups serve important social, psychological and economic functions. Differences in the expected outcome of living in a large compared with a small group form the basis for our hypotheses. The size of the group chosen should be a function of economic resources. Large groups may afford greater financial sharing opportunities and advantage can be taken of economies of scale in obtaining shelter. Financial risks are spread more widely in a larger group; that is, if one resident leaves the dwelling, the temporary increase in costs to remaining residents is lower in a large group. Socially, group living offers companionship with one or more others as an alternative to the social environment of the family. Individuals will tend to live with others who share similar personality characteristics, have common roles and interests, and similar biological traits (Hare 1982). Psychologically, group living provides independence from parental supervision and freedom from the psychological and sexual commitment required of married or partnered relationships. Also, the choice of group size depends on an individual's preference for privacy. While small groups offer greater intimacy, they provide less security and less stability for the individual if some group member should decide to withdraw (Hare 1981). The choice between living alone and living in a group likely distinguishes individuals with greater self-confidence in their skills for total versus partially independent living; e.g., the abilities to cook, clean, do laundry and handle financial matters. In this sense, large groups require the least independence.

We account for types of exits other than to groups by including two other destination categories: exiting to live alone and exiting to marry or live with a partner. The contemporary trend toward slower entry into marriage has had divergent effects. Myers (1992) notes the positive relationship of this trend with a rise in nonfamily households, specifically an increase in the number of youths living alone. Others have associated the trend with an increase in the tendency of youths to remain in their parental home (Heer et al. 1985; Buck and Scott 1993; Goldscheider and Goldscheider 1993a). We follow prior studies of the transition of young adults to independent living by separating marriage and other sexually partnered relationships from living alone (Thornton et al. 1993).

2.2. *Explaining the transitions: Economic factors*

In the literature, factors associated with leaving home fall into several major categories: economic factors, family background and family structure, and demographic and personal characteristics. Characteristics of both youths and parents have been considered relevant to the decision of when a youth leaves home. Underlying the inclusion of these measures are arguments regarding motivations for leaving home. These include normative or age-appropriate expectations about when to leave home, stress factors motivating an exit, opportunities motivating an exit, a general preference for autonomy and privacy, and intergenerational transfers (Rosenzweig and Wolpin 1993, 1994). Our discussion focuses on hypotheses related to the tendency to exit to small versus large groups.

Household formation should depend on the cost of independent living, with the cost of shelter as one component. While most demographic studies have omitted this intuitively influential factor, the empirical economic literature finds that high housing costs reduce the tendency of youths to reside outside the parental home (Borsch-Supan 1986; Haurin et al. 1993, 1994, 1997; Bourassa et al. 1994; Ermisch 1999). Ermisch and Di Salvo (1997) find that higher housing costs reduce the tendency of British women, but not men, to live outside the parental home. Johnson and DaVanzo (1998) find this effect for Malaysian sons, but not daughters.

Ermisch and Di Salvo (1997) and Ermisch (1999) show that the long run impact of the cost of shelter on a youth's living arrangement is theoretically indeterminate. They argue that variations in housing cost affect both the housing consumed by a youth living outside the parental home and the housing consumed by the parents. For example, comparing a high housing cost locality to a low cost area, the parents' quantity of housing consumed will be relatively small, as is a youth's potential quantity consumed. Thus, it is not clear that a youth is better off remaining with parents. Ermisch and Di Salvo find that if the absolute value of the price elasticity of housing demand is less than or equal to one (as in the U. S. and Great Britian), then youths should respond to higher housing costs by remaining with their parents. We follow Ermisch and Di Salvo and hypothesize that the greater the cost of shelter, the less likely is a youth to live alone rather than remain with a parent. We extend their model by hypothesizing that as housing costs increase, the greater is the likelihood of living in a group compared with living alone. Further, the probability of living in a large group should rise, the higher are housing costs.

As a youth's earnings ability rises, we expect the tendency to live in a large group to decline. Generally, the literature has measured an individual's ability to pay the cost of independent living by using personal income (Ermisch and Overton 1985; Goldscheider and DaVanzo 1985; Avery et al. 1992). However, as argued in Haurin et al. (1993), Bourassa et al. (1994), and Whittington and Peters (1996), income is the product of the wage rate and the amount of labor supplied. Participation in the paid labor force is a decision that occurs jointly with the decision on household formation. For example, a youth may not work because he or she is subsidized in the parental household. Similarly, observed wages may not accurately reflect earnings capacity if the current job is part-time (which is more likely if the youth does not reside alone). Therefore, the potential wage, or the wage that could be earned if a youth took on the responsibility of independent living, is the theoretically preferred predictor

of the tendency to reside outside the parental household. We estimate a potential wage for each respondent for each year using the procedure described in the appendix.

Neither the research on the impact of housing costs nor the more substantial research on the impact of income or wages on household formation has considered whether the influence of these factors varies with a youth's age. We argue that the impact of a unit change in an economic variable increases as a youth ages. At very young ages (15–18), we expect the impact of socio-demographic variables to dominate the explanation for leaving the parental home, but for older youths (25+), we expect both economic and socio-demographic variables to play significant roles. Underlying this hypothesis is an argument that teens leave the parental home if "pushed" by social factors. The "pull" of economic variables such as a high potential wage or low housing cost is ineffective because, typically, parents act as an economic buffer. However, for older youths, the desire for independence from parents reinforces the pull of favorable economic factors, making a transition from the parental home more likely. Parental resources have been shown to be important to a youth's transition to independent living. Avery et al. (1992), Whittington and Peters (1996), Ermisch and Di Salvo (1997), and Ermisch (1999) argue that parents with sufficient resources influence their children's choice of living arrangement by altering financial transfers they make with the children. The direction of impact may depend on the youth's age. For example, parents could use their resources to keep children at home during the teenage years, but then use their resources to promote home-leaving when the youth becomes a young adult. As an alternative to parental income (not observed in our data), we include a measure of parental education. Conditional on exiting the parental home, we expect increased parental resources to increase the tendency of exiting to small groups relative to large.

Macro-level economic characteristics of a youth's environment such as the availability of public assistance and local unemployment may affect housing decisions. Haurin et al. (1993) and Whittington and Peters (1996) argue that young adult women consider the availability of public assistance benefits through the Aid to Families with Dependent Children (AFDC) program in deciding whether to leave home. Untested is whether this availability has an impact on their tendencies to group-up or live alone. Whittington and Peters argue that a youth's response to AFDC will be age-linked. If 18 or older, a higher AFDC payment rate should encourage an exit from the parents' home, if less than 18, the youth's parents should desire to retain the child in their home. In all cases, the impact of AFDC on residence should be limited to eligible youths. We create an indicator variable reflecting eligibility and interact it with a measure of AFDC payment rates.

A higher rate of local area unemployment lowers the probability of securing a job that pays the youth's potential wage and thus increases the financial risk of independent living (Ermisch and Di Salvo 1997; Haurin et al. 1997). Thus, we expect youths in localities with high unemployment to be more likely to exit to a large group than to a small group.

2.3. Explaining the transitions: Family background and family structure

One of the largest areas of interest with regard to the transition of youths to residential independence has been prior family structure and relationships. Of

particular interest has been analysis of the impact of prior residence with a stepmother or a stepfather (White and Booth 1985; Mitchell et al. 1989; Aquilino 1991; Avery et al. 1992; Haurin et al. 1997; Goldscheider and Goldscheider 1998). Family stress deriving from these parental residential situations and exposure to unsuccessful relationships are often cited as the underlying cause for a youth's early exit from the parental home. However, this theory does not suggest a particular impact on an exiting youth's choice of group size. Single parent households are likely to have lower income; thus, they are able to provide less financial support for an exiting child. We expect that youths exiting from single parent households will be more likely to exit to a large group.

We expect that the greater the number of siblings living outside the parental home, the more likely is a transition to a large group. The justification for this hypothesis is that there is an enlarged pool of potential roommates when there are more siblings living independently. We expect that the greater the number of siblings who continue to reside in the parental home, the more likely will be the selection of a large group, assuming exiting youths continue to prefer to live with a large number of people. First born youths are more likely to have the skills needed for independent living; thus, we expect them to be more likely to exit to live alone or in small groups compared with large.

Avery et al. (1992) suggest that responsibility for minor own-children has mixed effects on leaving home. Young unwed parents have greater need for support from their own parents, but the presence of grandchildren reduces privacy for the parents of the young adults. An increased number of own-children should decrease the likelihood of leaving home for large groups.

Because Catholic youths tend to be raised in large families, their expectation may be that large families are normative. This observation suggests that exiting to a large group is more likely. However, as noted above, we control for the number of siblings. Finding a significant impact of being Catholic on the tendency to exit to a large group suggests that the norms supporting living in large groups exist for Catholic youths independently of the actual number of siblings.

2.4. Explaining the transitions: Demographic and personal characteristics

Large groups offer enhanced safety, and we expect that women select residences to enhance safety more so than do males. Offsetting this effect is the observation that young women are more likely to have the skills for independent living than young men, hence would be less likely to live in large groups. Allowing gender specific behaviors suggests that we should test the assumption that the samples of men and women can be pooled by first estimating separate models and then testing whether a combined model is acceptable. We find that the impacts of the explanatory factors differ significantly by gender; thus, we present only separate results.[2]

The youngest members of our sample are less likely to have confidence in their skills for independent living. The implication is that we expect older youths to be less likely to exit to large groups, and somewhat less likely to exit to small groups.

Discrimination in the housing market could limit the residential choices of Black and possibly of Hispanic youths, perhaps leading to a greater tendency

to exit to large groups. Following Whittington and Peters (1996), we do not estimate separate models by race, the reason being our concern about the relatively small number of exits per race/gender category.

Students in college and not living in a dorm are likely to seek financial sharing of shelter costs by living in a large group. Including as an explanatory variable a measure of a youth's earning ability is not sufficient to capture this effect because college students have relatively high earnings potential, but they are likely to have relatively low current income, hence they have an incentive to share shelter costs. We include an indicator variable for a youth being in college.

Another variable not typically considered is a youth's health. We expect that poor health reduces a youth's ability to live independently. If a youth reports a health concern and exits the parental home, there are potentially offsetting factors impacting the choice of living arrangement. A youth with a health problem may seek to live in a large group to more efficiently share household responsibilities. However, finding roommates may be more difficult for someone with a health impairment.

We test for the impact of living in an urban area on transition probabilities. Urban areas tend to have relatively high crime rates; thus, we expect youths will tend to form large groups for additional security. Urban areas also are associated with relatively high shelter costs, but we control directly for this variable. We also include three dummy variables indicating the region of residence in the U.S.

3. Hazard model

Our model describes an individual's decision at any point in time to reside in one of five possible arrangements. We estimate a reduced form model using a competing risks framework (Kalbfleisch and Prentice 1980). The occurrence of a transition from the parental home to another living arrangement removes the individual from the risk of experiencing any other transition. The competing risks framework characterizes each transition by a separate transition rate and hazard function.

The type-specific hazard function is defined as the probability that an individual will move from the parental home to living arrangement type j after $t + \Delta t$ years given that they lived in their parental home at least t years (Kalbfleisch and Prentice 1980; Allison 1984). The hazard rate h is defined to be a function of time and a set of explanatory variables:

$$h_j(t, Z) = \lim_{\Delta t \to 0} [P(t \leq T < t + \Delta, J = j \mid T \geq t, Z)/\Delta t] \quad j = 1, \ldots, m \quad (1)$$

where j is the destination living arrangement following the transition; t is the number of years living in the parental home; and Z is a vector of sociodemographic and economic factors that may change in value over time. The overall hazard function is the sum of all the type-specific hazard functions. The period of observation begins with a youth living in his or her parental home and we follow the youth until the first exit from the parental home or until the observation is right censored. We use a discrete-time framework to

estimate the model because of the annual nature of the data; that is, we can identify the time of transition only by comparing responses in adjacent survey years. The model is multinomial logit because there are four exit types (Greene 1993).

4. Sample and variables

4.1. Sample characteristics

We employ annual data from the 1979 to 1992 waves of the U.S. National Longitudinal Survey of Youth (Center for Human Resource Research 1993). The NLSY79 contains a national sample of youths aged 14 to 21 in 1979. Oversamples of Blacks, Hispanics and economically disadvantaged whites permit statistical analyses of these population subgroups. Survey attrition rates are low with approximately 90 percent of the eligible sample retained as of the 1992 survey.

We limit our study sample to respondents age 14 to 17 who resided in their parental household in 1979. Residential locations are followed through the first exit or until 1992, yielding 27,472 person-year observations. Because exiting prior to age 16 is highly unlikely, we omit 919 observations when a respondent is age 14 or 15, these ages only observed in 1979 or 1980. Missing data reduce our final sample to 16,184 person-year observations (7,360 for females and 8,824 for males) for which 2,661 exits are observed.[3]

4.2. Dependent variable

The dependent variable is a categorical measure of the five possible current living arrangement of the respondent. The types of exits are coded as: '0' if continuing to reside in the parental home, '1' if exited to live alone with or without own-children, '2' if exited to live with a spouse or partner and possibly children, '3' if exited to live with a group that includes one nonspouse/nonpartner adult, and '4' if exited to live in a group with more than one other nonspouse/nonpartner adult. The distribution of these exits in our sample is 28% to living alone, 39% to living with spouse/partner, 18% to living in a small group, and 15% to living in a large group. Descriptive statistics for the dependent and independent variables are listed in Table 1. These statistics cover the 1979–1992 period and include all person-year observations.

4.3. Explanatory variables

Housing cost is a continuous variable representing the constant-quality housing cost in the area in which the respondent resides. By using a constant-quality measure, variations in the average amount of housing consumed between communities and over time are controlled.[4] Another economic factor is Potential Wage, a continuous variable that estimates the wage the respondent could obtain if he or she worked full-time. We estimate wage using a two-step framework that is described in the appendix (Heckman 1979; Greene 1995).

Table 1. Descriptive statistics for the full sample: 1979–1992

Variable	Females		Males	
	Mean	Std. Dev.	Mean	Std. Dev.
Exit from parental household (1 = yes)	0.19	0.39	0.15	0.36
Age in years	19.78	2.71	19.95	2.80
Black (1 = yes)	0.25	0.43	0.24	0.43
Hispanic (1 = yes)	0.15	0.36	0.14	0.35
In-high school (1 = yes)	0.23	0.42	0.25	0.43
In-college (1 = yes)	0.24	0.43	0.19	0.39
Out of school-LTHS (1 = yes)	0.11	0.31	0.21	0.41
Health limit (1 = yes)	0.03	0.16	0.02	0.12
Stepmother (1 = yes)	0.01	0.09	0.01	0.12
Stepfather (1 = yes)	0.06	0.24	0.05	0.22
Single parent (1 = yes)	0.33	0.47	0.33	0.47
Number of sibling-in	1.77	1.57	1.84	1.61
Number of sibling-out	1.69	2.01	1.74	2.14
First born (1 = yes)	0.25	0.43	0.25	0.43
Number of own-children	0.11	0.38	0.01	0.13
Catholic (1 = yes)	0.37	0.48	0.34	0.47
Religious attendance (1 = more than once a month)	0.61	0.49	0.51	0.50
Local housing cost	0.58	0.16	0.58	0.16
Potential wage in 1979 dollars/hour	3.88	0.89	4.96	1.20
Parental education in years	11.05	2.95	11.02	3.07
Local unemployment rate (%)	8.62	3.55	8.66	3.59
Urban (1 = yes)	0.62	0.48	0.60	0.49
AFDC eligible (%)	15.30	56.06	2.69	27.35
South (1 = yes)	0.40	0.49	0.37	0.48
Midwest (1 = yes)	0.27	0.44	0.28	0.45
West (1 = yes)	0.14	0.35	0.15	0.36
Samples size		7,360		8,824

All variables denominated in dollars are deflated using the CPI-U with 1979 as the base year.

Two additional variables are created by interacting the housing cost and potential wage with a semicontinuous variable (Age 18) that equals the respondent's age if age is greater than or equal to 18; otherwise, if age is less than 18, the interaction variable takes the value zero. This specification allows the interaction variable to capture age-related effects once the respondent's age has passed the threshold of 18 years.[5]

Other economic variables include Parental Education, a proxy for parental resources and measured as the highest grade completed by the respondent's mother (if data on the mother are not available, then the father's value is used), and the Local Unemployment Rate, a continuous variable measuring the local unemployment rate for the labor market in which the respondent resides. We also include AFDC Eligible, the product of an indicator of whether the respondent is eligible to receive AFDC payments and the maximum AFDC benefit for a family of three in the respondent's state.[6]

Demographic and personal characteristics hypothesized to affect living arrangements include the respondent's age and its square to test for nonlinear effects. Race and ethnicity are operationalized through two indicator variables: Black non-Hispanic and Hispanic, with non-Black non-Hispanic being

the omitted race/ethnicity category. We interact a dummy variable for whether the respondent is currently attending school with an indicator of whether the respondent's highest grade completed is less than high school (LTHS) or high school or beyond (GEHS). The resulting three variables are named In-High School, In-College, and Out of School-LTHS. The omitted category is Out of School-GEHS. Health Limit is an indicator variable for whether the respondent reports having a health condition that limits his or her ability to work. Urban is an indicator variable equaling unity if the respondent lives in an MSA. Three regional indicator variables are included with the eastern U.S. being the omitted category.

Family background and structure variables include indicator variables for whether the respondent is living with a stepmother, a stepfather, or a single parent. These variables are lagged one year to avoid endogeneity with the respondent's living arrangement decision. Family size variables include: Number of Siblings-In, a continuous variable for the number of the respondent's siblings that live in the parental home; Number of Siblings-Out, a similar measure for the number of siblings that live outside of the parental home; and First Born, an indicator variable for whether the respondent is the first child of his or her mother. The two measures of siblings are lagged one year. Other family variables include Own-Children, a continuous variable for the number of respondent's own-children that lives with the respondent, and Catholic, an indicator variable for whether the respondent reports his or her religious affiliation as Catholic. We include as a control variable an indicator variable for whether the respondent reports attending religious services more than once a month (Religious Attendance).

5. Results

We report the estimates from the multinomial logit model in Tables 2 (females) and 3 (males).[7] Listed are the marginal impacts of changing an explanatory variable by one unit on the probability of observing a particular living arrangement. Marginal impacts can be computed for all possible living arrangements *including* the reference category in the multinomial logit, remaining with parents (see Greene 1995, Ch. 24). An example of the interpretation of a marginal effect in Table 2 for the coefficient of a dummy variable such as Black is that a Black female respondent is 4.09 percentage points more likely to live with parents than a white respondent in any particular year. For a continuous variable such as the unemployment rate, the interpretation is that a one percentage point higher unemployment rate increases a female's probability of remaining with parents by 0.04 percentage points. The first column of data contains results for remaining with parents, followed by columns for exiting to live alone, live with a spouse or partner, live in a small group, and live in a large group. Reading across a row reveals the comparative effects of a unit change in an explanatory variable. We present a series of pair-wise tests of differences in coefficients among all types of living arrangements. Using codes of "a" to "o", we indicate whether two coefficients differ for three levels of significance (0.01, 0.05, 0.10). Of particular interest are those cases where the impact of an explanatory variable differs comparing exits to small groups with exits to large groups (categories j through o).

Variable	Remain with parents		Exit to live alone		Exit to live with spouse/partner		Exit to live in small group		Exit to live in large group	
	Coeff.	Std.error	Coeff.	Std.error	Coeff.	Std.error	Coeff.	Std.error	Coeff.	Std.error
Constant	1.72 d,g,j,n	(0.24)	−0.59 a	(0.13)	−0.66 a	(0.14)	−0.27 a	(0.11)	−0.21 b	(0.12)
Age	−12.11 d,g,k	(2.18)	3.90 a	(1.15)	5.11 a	(1.23)	1.71 b	(0.97)	1.39	(1.09)
Age squared	0.28 d,g,k,o	(0.05)	−0.08 a	(0.03)	−0.12 a	(0.03)	−0.04 b	(0.02)	−0.04 c	(0.03)
Black	4.09 g,n	(1.09)	0.74 g,k,m	(0.58)	−3.30 a,d,k	(0.67)	−0.05 e,h	(0.45)	−1.02 b,d	(0.48)
Hispanic	1.49	(1.33)	−0.72	(0.81)	−0.24	(0.74)	−0.13	(0.56)	−0.40	(0.51)
In-high school	19.73 e,g,j,m	(1.81)	−1.29 b,g,j,n	(0.98)	−10.27 a,d,o	(1.19)	−5.53 a,d,n	(0.83)	−2.64 a,e,i,k	(0.69)
In-college	11.40 d,g,j	(1.06)	−2.14 a,g,n	(0.57)	−8.11 a,d,j,m	(0.77)	−0.99 a,g	(0.38)	−0.16 e,g	(0.36)
Out of school-LTHS	−3.10 g,n	(1.18)	0.17 i,o	(0.71)	2.24 a,f,k	(0.60)	−0.24 a,h,n	(0.54)	0.94 b,f,k	(0.46)
Health limit	−6.97 e,h,n	(1.96)	2.30 b	(1.02)	2.57 b	(1.10)	0.55	(0.91)	1.56 b	(0.66)
Stepfather	−2.16	(1.53)	0.76	(0.86)	1.03	(0.90)	0.12	(0.64)	0.26	(0.56)
Single parent	1.00 n	(0.84)	0.27 o	(0.47)	−0.47 l,m	(0.50)	0.44 i	(0.35)	0.76 b,f,g	(0.33)
Number of sibling-in	0.35 f	(0.25)	−0.27 c,o	(0.15)	−0.06	(0.15)	−0.04	(0.11)	−0.03 f	(0.10)
Number of sibling-out	−0.62 g,m	(0.20)	−0.08 h,l,m	(0.12)	0.32 a,e,o	(0.11)	0.12 f,n	(0.08)	0.26 a,d,i,k	(0.07)
First born	−0.97 g,k	(0.94)	0.64 j,o	(0.52)	1.63 a,j,m	(0.53)	−1.04 b,d,g,o	(0.43)	−0.26 f,g,l	(0.40)
Number of own-children	−0.97 e,g	(1.20)	1.04 b,j,m	(0.49)	1.74 a,j,m	(0.58)	−0.89 d,g	(0.63)	−0.92 d,g	(0.71)
Catholic	2.14 h	(0.91)	−0.79 o	(0.54)	−0.99 b	(0.53)	−0.54 o	(0.39)	0.18 f,l	(0.34)
Religious attendance	0.34	(0.74)	0.35	(0.43)	−0.10	(0.42)	−0.32	(0.31)	−0.28	(0.30)
Local housing cost	−8.51 k	(6.33)	4.28	(2.99)	−1.171	(4.70)	5.09 b,i	(2.45)	0.30	(2.30)
Local housing cost * age	0.44 f,l	(0.29)	−0.23 c	(0.14)	0.06	(0.21)	−0.20 c	(0.12)	−0.08	(0.12)
Potential wage	−0.91	(1.33)	0.29	(0.69)	0.44	(0.90)	−0.09	(0.59)	0.27	(0.51)
Potential wage * age	−0.10	(0.06)	0.03	(0.03)	0.01	(0.04)	0.03	(0.03)	0.02	(0.02)
Parental education	−0.26	(0.15)	0.09	(0.09)	0.03	(0.09)	0.09	(0.06)	0.05	(0.06)
Local unemployment rate	0.04	(0.12)	0.01	(0.07)	0.03	(0.07)	−0.02	(0.05)	−0.06	(0.05)
Urban	0.23	(0.79)	−0.06	(0.45)	−0.73 n	(0.45)	0.20	(0.34)	0.37 h	(0.33)
AFDC eligible	0.01 d,g	(0.008)	0.01 a,g,k,n	(0.003)	−0.002 a,d,j,n	(0.005)	0.001 e,g	(0.003)	−0.001 e,h	(0.003)
South	−5.01 e,h,j	(1.16)	1.61 b	(0.69)	1.36 b,l	(0.65)	1.60 a,i,n	(0.53)	0.43 k	(0.46)
Midwest	−4.18 e,k,o	(1.19)	1.36 b	(0.72)	0.87	(0.67)	1.27 b	(0.54)	0.68 c	(0.45)
West	−8.43 d,g,j,m	(1.38)	3.25 a,i	(0.81)	1.87 a,f,l	(0.80)	1.99 a,i	(0.61)	1.32 a	(0.52)

[a] Sample size is 7,360. All coefficients and standard errors except that for the constant are $\times 10^{-2}$.

a,b,c = Significantly different from the coefficient estimate for 'remains with parents' at the 0.01, 0.05, 0.10 levels.
d,e,f = Significantly different from the coefficient estimate for 'exit to alone' at the 0.01, 0.05, 0.10 levels.
g,h,i = Significantly different from the coefficient estimate for 'exit to spouse/partner' at the 0.01, 0.05, 0.10 levels.
j,k,l = Significantly different from the coefficient estimate for 'exit to small group' at the 0.01, 0.05, 0.10 levels.
m,n,o = Significantly different from the coefficient estimate for 'exit to large group' at the 0.01, 0.05, 0.10 levels.

Variable	Remain with parents		Exit to live alone		Exit to live with spouse/partner		Exit to live in small group		Exit to live in large group	
	Coeff.	Std.error	Coeff.	Std.error	Coeff.	Std.error	Coeff.	Std.error	Coeff.	Std.error
Constant	1.30 d,g,k,m	(0.22)	−0.44 a,i,o	(0.14)	−0.32 a,f,k	(0.08)	−0.20 b,h,n	(0.10)	−0.33 a,f,k	(0.11)
Age	−9.55 d,g,l,m	(1.89)	2.93 a,h,n	(1.23)	2.60 a,e,k	(0.65)	1.36 c,h,n	(0.87)	2.67 a,e,k	(1.03)
Age squared	0.22 e,g,k,m	(0.04)	−0.06 b,i,m	(0.03)	−0.06 a,f,l	(0.01)	−0.03 b,i,n	(0.02)	−0.07 a,d,k	(0.02)
Black	3.50 e,g,n	(0.85)	−1.22 b,i	(0.59)	−1.08 a,f,k	(0.31)	−0.31 h,o	(0.39)	−0.89 b,l	(0.37)
Hispanic	0.37 l	(1.01)	0.34 k	(0.71)	0.40 j	(0.31)	−0.95 c,e,g	(0.52)	−0.16	(0.39)
In-high school	10.54 d,g,j,m	(1.43)	−3.41 a	(0.94)	−2.67 a	(0.75)	−2.29 a	(0.67)	−2.17 a	(0.58)
In-college	3.76 d,g,l,o	(0.88)	−1.80 a,g,m	(0.61)	−1.92 a,d,j,m	(0.45)	−0.65 c,g,m	(0.38)	0.62 c,d,g,j	(0.31)
Out of school-LTHS	0.71	(0.76)	−0.49	(0.54)	−0.10	(0.21)	−0.23	(0.36)	0.11	(0.33)
Health limit	4.48	(2.84)	0.19	(1.60)	−1.24	(1.00)	−1.55	(1.50)	−1.88	(1.69)
Stepmother	−4.63 k	(2.23)	1.54	(1.66)	0.14	(0.81)	1.87 b	(0.80)	1.08	(0.76)
Stepfather	−3.23 h,o	(1.30)	1.21	(0.94)	0.78 b	(0.41)	0.44	(0.59)	0.79 c	(0.46)
Single parent	−1.55 k,o	(0.67)	−0.08 k,n	(0.49)	−0.04 k,n	(0.20)	0.74 b,e,h	(0.31)	0.53 c,e,h	(0.28)
Number of sibling-in	0.07 n	(0.20)	−0.14 m	(0.15)	−0.08 m	(0.07)	−0.03 n	(0.10)	0.18 b,d,g,k	(0.08)
Number of sibling-out	−0.29 m	(0.15)	0.15	(0.11)	−0.02 m	(0.05)	0.01 n	(0.07)	0.16 a,g,k	(0.06)
First born	−0.37 h	(0.73)	0.39 o	(0.51)	0.44 b,l,m	(0.22)	−0.06 i	(0.34)	−0.40 f,g	(0.31)
Number of own-children	1.58 g	(2.71)	−2.69 h,k	(2.07)	1.14 a,e,n	(0.40)	0.93 e,o	(0.80)	−0.96 h,l	(1.59)
Catholic	0.84 g	(0.74)	−0.39 i	(0.54)	−0.70 a,f,j,n	(0.25)	0.16 g	(0.34)	0.09 h	(0.29)
Religious attendance	1.15	(0.60)	−0.63 i	(0.43)	0.15 f,n	(0.18)	−0.28	(0.28)	−0.39 h	(0.25)
Local housing cost	−0.64	(6.35)	3.91	(3.64)	1.17	(3.39)	−3.57	(3.56)	−0.86	(2.50)
Local housing cost * age	0.02	(0.29)	−0.12	(0.17)	−0.08	(0.15)	0.16	(0.16)	0.02	(0.12)
Potential wage	1.53 h	(0.84)	−0.54	(0.51)	−1.07 b,l,n	(0.43)	−0.11 i	(0.44)	0.20 h	(0.33)
Potential wage * age	−0.08 h	(0.04)	0.02	(0.02)	0.05 b,l,o	(0.02)	0.01 i	(0.02)	0.00 i	(0.02)
Parental education	−0.12	(0.11)	0.03	(0.08)	−0.03 k	(0.03)	0.08 h	(0.05)	0.04	(0.04)
Local unemployment rate	0.43 e,j,n	(0.11)	−0.16 b	(0.07)	−0.04	(0.03)	−0.12 a	(0.05)	−0.10 b	(0.04)
Urban	−0.82	(0.64)	0.64 l	(0.46)	0.16	(0.19)	−0.25 f,o	(0.30)	0.28 l	(0.27)
AFDC eligible	−0.04 d,g	(0.01)	0.03 a,j,m	(0.005)	0.01 a,j,m	(0.003)	0.003 d,g	(0.005)	0.000 d,g	(0.006)
South	−4.89 d,h,j,n	(0.92)	2.08 a	(0.64)	0.54 b	(0.28)	1.39 a	(0.48)	0.88 b	(0.38)
Midwest	−3.68 e,j	(0.95)	1.24 b,j	(0.68)	0.06 j	(0.28)	1.88 a,d,g,m	(0.48)	0.50 j	(0.40)
West	−5.52 e,j,m	(1.08)	1.43 b,j,n	(0.78)	0.01 j,m	(0.34)	2.60 a,d,g	(0.53)	1.48 a,e,g	(0.43)

[a] Sample size is 8,824. All coefficients and standard errors except that for the constant are $\times 10^{-2}$.

a,b,c = significantly different from the coefficient estimate for 'remains with parents' at the 0.01, 0.05, 0.10 levels.

d,e,f = significantly different from the coefficient estimate for 'exit to alone' at the 0.01, 0.05, 0.10 levels.

g,h,i = significantly different from the coefficient estimate for 'exit to spouse/partner' at the 0.01, 0.05, 0.10 levels.

j,k,l = significantly different from the coefficient estimate for 'exit to small group' at the 0.01, 0.05, 0.10 levels.

m,n,o = significantly different from the coefficient estimate for 'exit to large group' at the 0.01, 0.05, 0.10 levels.

5.1. Economic factors

The impact of an increased potential wage on home-leaving is generally as expected and is large. A one dollar increase in female wages reduces her annual probability of remaining with parents by 2.9 to 3.9 percentage points as age rises from 20 to 30. The results are much less strong for males. Increased wages have the effect of reducing the probability of remaining with parents once a male is age 19, but even at age 30, the impact of a one dollar increase is slightly less than one percentage point. We find no difference in the impact of a higher wage on the tendency to exit to small compared to large groups for either gender.

A higher housing cost increases the probability of a female remaining with parents once she becomes at least age 20. The probability of remaining with parents is 2.7 percentage points higher for a female age 30 residing in a locality where the cost of shelter is double the sample average compared with a female living in an area with shelter cost equal to the sample average. Her probability of living alone is 1.5 percentage points lower when shelter costs are double the sample average. For male youths, we find no statistically significant effects. Finding a response for women, but not men, agrees with the results in Ermisch and Di Salvo (1997) who studied a sample of British youths. There is no impact of housing cost on the tendency to exit to small versus large groups.

Female youths eligible for AFDC are less likely to exit to marriage/partnering. There is no difference of the impact of AFDC eligibility on the tendency to exit to large or small groups. Eligible male youths are less likely to remain with parents or exit to any group than exit to marriage or live alone.[8]

A higher local unemployment rate raises the probability of remaining with parents for male youths compared to exiting to live alone or either type of group. The effect of variations in the unemployment rate on females living arrangements is small.[9] The better educated are parents (our proxy for parental resources), the lower the chance of males exiting to marriage compared with exiting to a small group. We find no impact of parents' education on the distribution of females' exit types.[10]

5.2. Demographic characteristics

We find that as a youth ages, the most likely destination of the first exit from the parental home differs.[11] For men, the probability of exiting to a large group peaks at age 19.9, followed by peaks for a small group (age = 21.8), living alone (23.8), and marriage/partnering (25.4). For women, the same pattern is observed; exits peak first for a large group (age = 18.3), then a small group (20.1), followed by living alone (23.0), and marriage/partnering (23.8).

Controlling for other socioeconomic and demographic variables, Black males and females are less likely to exit to marriage or a large group and are more likely to live with parents than white youths. Black males are less likely to exit to live alone than stay with parents. These observations are consistent with the hypothesis that discrimination in the housing market reduces the tendency of Black youths to leave home because of the greater difficulty of securing shelter in any type of living arrangement. Unexpectedly, Black males are more likely to exit to small compared with large groups.

In contrast, the only significant finding for Hispanic youths is a lower tendency for males to exit to small groups than remain with their parents, live alone, or marry. This result is consistent with the lower level of housing market discrimination encountered by Hispanics compared with Blacks (Yinger 1991).

Being a high school student greatly increases the probability of remaining with parents and reduces the probability of exiting to all other living arrangements. Being a post high school student increases the probability of remaining with parents (or living in a dormitory) and reduces the probability of exiting to living alone, marriage/partnering, or a small group. Both males and females are more likely to exit to a large group compared with a small group when in college, this result expected for cost conscious college students, but the result is only statistically significant for males.

The impact of ill health differs greatly by gender. A female youth with a health problem that limits her work is less likely to remain with parents and is more likely to exit to live alone, married/partnered, or a large group. In contrast, males with a health problem are more likely to remain with parents, but the coefficient is not significant.

Male youths residing in urban areas are less likely to exit to a small group than to a large group or to live alone. Female youths in urban areas are less likely to exit to marriage/partnering and are more likely to exit to large groups. Finding that women in urban areas tend to live in large groups is expected, likely a result of seeking greater safety.

Compared to respondents living in the eastern U.S., all youths are less likely to remain with their parents. Exits to all destinations are more likely for those in the south, midwest, and west relative to those in the east, although some of the estimated effects are not statistically significant.

5.3. Family background and family structure characteristics

The impact of living with a stepmother is estimated only for males because of colinearity problems when this variable is included in the estimation for females. For males, the effect of a stepmother is to reduce the probability of remaining in the parental home by five percentage points. Living with a stepfather reduces the likelihood of remaining with parents by two percentage points for female youths and three for males. These results are as expected and are consistent with the finding of Avery et al. (1992). There are no differences in the impact on exits to small or large groups.

The number of siblings and birth order affect exit choices. First born children are more likely to exit to live with a spouse or partner than are children born second or later. They also tend to live alone rather than in a group, this expected. Increased number of siblings in the parental home reduces the likelihood of exiting to live alone (females only), and increases the probability of exiting to a large group (males only), but the impacts are small. The greater the number of siblings living outside the parental home the greater the likelihood of exiting to marriage/partnering (females), and group arrangements. As expected, the largest effect of having more siblings outside the parental home is to increase the probability of exiting to a large group compared with small groups.

An increased number of respondent's own-children reduces the tendency of a female youth to remain in the parental home or exit to live in a small

or large group. Males with own-children are unlikely to exit to live alone or to large groups compared with remaining with parents or exiting to marriage or small groups.

Individuals raised as Catholics are more likely to remain with parents and are less likely to exit to live alone or with a spouse/partner compared with exiting to large groups. Catholic females are less likely to exit to a small group than a large group. We are surprised by the lower probability of exiting to the marriage destination; however, this category includes living with a partner. Thus, the negative marginal impact of being Catholic on exiting to marriage/partnering may result from the dominant effect of a much lower rate of exiting to live with a partner. Males who attend church frequently are more likely to exit the parent's home to marry than to live in a large group or live alone.

The impact of the explanatory variables is shown in greater detail in Table 4. We establish a base case by applying a set of assumptions to a 16 year old white youth.[12] We follow the youth for 13 years and cumulate the probability distribution of possible exit types. The table lists the cumulative distributions for the base case and many variations. In the base case for men, the most likely exit is to marriage/partner (39%), followed by living alone (34%), exiting to a small group (13%), and to a large group (11%). There is only a 3% chance that this male youth will continuously live at home through age 29. For women, the distribution of exit probabilities differs: 49% to marriage/partner, 21% to small groups, 19% to alone, 9% to large groups, and 2% remain in the parental home.

Variations in the base case include increasing the house price by one standard deviation, reducing the unemployment rate by 25%, increasing parents' education to 16 years, and raising the youth's mental ability score by one standard deviation. Other variations include changing the youth's race/ethnicity to Black or Hispanic, having a child at age 18, being a college graduate, and having a stepfather or stepmother.

We also report the expected duration of stay in the parental home, this value equaling 4.9 years for males and 4.1 for females in the base case. The most notable changes in the expected duration of stay with parents occur when a youth's education is increased to 16 years from 12 (stay with parents for one year longer), when a youth is Black (stay with parents for one year longer), or when a male lives with a stepparent (stay with parents is nearly one year shorter).

Reading across a row reveals the impact of a change in an explanatory variable on that exit type. In general, the effects are consistent with the previous discussion. The table also reveals the overall size of the impact on the distribution of exits. The biggest effects, arbitrarily measured as the sum of absolute values of deviations from the base case probabilities, are for a youth who has a child at age 18, being Black, completing college, having a stepfather, and living in a high house price locality.

6. Conclusions

In recent years, spurred by the availability of longitudinal data, significant progress has occurred in understanding the factors that explain when youths leave their parental homes. Our study complements those analyses by adding detail to the list of potential destinations and by adding to the list of

Table 4. Impacts of variations in selected explanatory variables on a 16 year old white youth

Variable	Base case[a]	House price +1 s.d.[b]	Mental ability +1 s.d.	Unemployment rate 8% ⇒ 6%	Black	Hispanic	Youth has child when 18	Stepfather	Stepmother	Youth: college grad	Parents college grads
Male youths											
At home	0.03	0.02	0.03	0.02	0.10	0.02	0.01	0.01	0.01	0.02	0.03
Alone	0.34	0.38	0.34	0.35	0.35	0.35	0.17	0.34	0.36	0.32	0.35
Marriage	0.39	0.41	0.39	0.38	0.33	0.46	0.59	0.40	0.26	0.34	0.36
Small	0.13	0.10	0.13	0.14	0.15	0.08	0.17	0.12	0.23	0.13	0.15
Large	0.11	0.09	0.11	0.11	0.07	0.09	0.06	0.13	0.15	0.18	0.12
Mean duration[c]	4.9	4.8	5.0	4.8	6.0	4.9	4.7	4.2	4.0	6.0	5.0
Female youths											
At home	0.02	0.01	0.01	0.02	0.06	0.02	0.01	0.01		0.01	0.01
Alone	0.19	0.21	0.19	0.19	0.31	0.17	0.21	0.20		0.24	0.19
Marriage	0.49	0.42	0.48	0.49	0.35	0.51	0.60	0.51		0.35	0.47
Small	0.21	0.28	0.22	0.22	0.22	0.22	0.13	0.19		0.26	0.23
Large	0.09	0.08	0.10	0.10	0.06	0.08	0.05	0.09		0.14	0.09
Mean duration[c]	4.1	3.9	3.9	4.1	5.0	4.2	4.0	3.8		5.0	3.9

[a] The base case is defined in footnote 12.

[b] 1 s.d. indicates a change of one standard deviation.

[c] The value is the expected duration in the parental home in years.

explanatory factors. Our national sample is of American youths ages 16 to 30 in the period 1979–1992. We focus on exits to small and large groups, with about one-third of all exits being to groups.

We comprehensively model economic and socio-demographic factors expected to influence a youth's decision of whether to leave the parental home and what living arrangement to select. We highlight economic factors hypothesized to impact home-leaving and test whether the influence of these factors varies with a respondent's age. The estimation technique is a multinomial logit analysis.

Our first finding is that male and female home-leaving must be modeled separately. Gender specific differences in exit tendencies include responses to variations in the wage that could be earned in full-time employment, the local unemployment rate, the local cost of shelter, race and ethnicity, health problems, and residence in an urban area.

We test for and find some evidence of an age linked impact of economic factors. Our hypothesis is that parents shelter teens from economic factors such as a high cost of shelter and low potential income; however, this sheltering is reduced as the children age. Higher wages reduce the likelihood of staying with parents for youths older than 20. Higher housing costs increase the probability of staying with parents for women older than 20. No significant effect is found for men.

We hypothesized that socio-demographic factors dominate explanations of why youths leave the parental home when they are teens, but economic factors increase in influence as a youth matures. Our results support this hypothesis most strongly for female youths. A possible modification of our hypothesis is to argue that parents shelter their daughters from economic factors more so than they do their sons. Similar age linked responses to variations in parental income and AFDC payments were hypothesized by Whittington and Peters (1996), but we do not find support for their hypotheses.

Our results for housing costs and wage impacts on home-leaving are not as strong as in Haurin et al. (1993). One reason is that this paper's sample includes young teens while Haurin et al. (1993) did not. Another substantial difference is that Haurin et al. studied the current living arrangement of all youths while we analyze only their first exit destination. It may be that returns to the parental home are influenced by housing costs and earnings. If true, these variables would affect the results in Haurin et al. but not this study. Ermisch (1999) finds strong support for the argument that high housing costs and low incomes increase the rate of return to the parental home.

While understanding the likelihood of exiting to living alone or marriage is of interest, we highlight the study of exits to small and large groups. Exiting to a large group tends to be the first path out of the parental home for teens, followed by exiting to a small group. Table 5 summarizes the statistically significant impacts of the explanatory variables on youths' exits from the parents' home to large compared with small groups. Some results are as expected; for example, youths with a larger number of siblings living outside the parental home tend to exit to a large group (which may include some siblings). Also, college students have a greater tendency to exit to live in large groups. Black youths are more likely to exit to small groups than large, the unexpected effect statistically significant only for males. Youths dropping out of high school, Catholics, and youths in urban areas tend to exit to large groups.

We find that the determinants of whether youths exit the parents' home

Table 5. Significant impacts on the choice of exiting to small or large groups[a]

Group Size	Females		Males	
	Small	Large	Small	Large
Black			×	
Age	×		×	
Number of siblings-out		×		×
Number of siblings-in				×
First born		×		
Out of school-LTHS		×		
In high school		×		
In college				×
Number of own-children			×	
Catholic		×		
Urban				×
Midwest			×	
South	×			

[a] An '×' indicates that the marginal effect of this variable for this category (small group or large group) is significantly greater than the marginal effect for the other category (large group or small group) at least at the 0.10 level.

to large or small groups are dominated by socio-demographic factors, with economic factors being unimportant. The lack of significance of any of the economic variables in explaining the size of the group selected by exiting youths is surprising because economic variables are important in explaining whether youths remain in the parental home or leave. We believe the reason is that exits to groups typically occur at younger ages (teens and very early twenties), and economic factors tend to become important later when a youth is in his or her early to mid twenties.

Appendix: Potential wage estimation procedure

A potential full-time wage is estimated for each respondent for each year using a two-step Heckman procedure (Greene 1995; Heckman 1979). This wage represents the resources available to the respondent if she or he chooses to work full-time; thus, it must be estimated for those respondents not observed working full-time. The first step of the procedure requires estimating a probit model of full-time work status. We estimate identical models for males and females using a sample of respondents age 16 or older: 24,408 observations for males and 21,855 for females. The dependent variable is an indicator of full-time work status defined as 1600 or more hours worked during the calendar year. Explanatory terms include: age, age squared, Black, Hispanic, not a high school graduate, attended college but did not graduate, graduated college, the local unemployment rate, health limit, in-school, age of spouse and its square, number of children age 0 to 6, number of children age 7 to 17, and urban. Results of these regressions are available from the authors. They correspond well with our expectations with outcomes correctly predicted for 76% of males and 71% of females.

The second step is to estimate a wage equation for those respondents working full-time. For male respondents, full-time work was performed in 14,404 (59.0%) of the person-years. Females worked full-time in 10,599 (48.5%) of the person-years. The dependent variable is a continuous measure of the hourly rate of pay the respondent received in his or her current job. Preliminary exploration with the dependent variable transformed into logs yielded inferior results.

Explanatory terms included in the wage equation are age, age squared, Black, Hispanic, not a high school graduate, attended college but did not graduate, graduated college, urban, health limit, the local unemployment rate, job tenure, a measure of the respondent's mental ability, a series of 13 year specific dummy variables, and the sample selection correction variable (inverse Mills ratio) generated from the full-time work status equation. Results for these regressions are available from the authors. The equations for males and females are generally similar. Significant and negative is Black (4% lower wage for males and 6% lower wage for females) and the local unemployment rate. Significant and positive are attended college but did not graduate (a 4%–8% higher wage) and graduated college (a 25%–33% higher wage). Also significant is urban (a 12%–14% higher wage) and the score on the mental ability test (a one standard deviation increase raises wage by 10%–11%). In both cases the potential wage rises with respondent's age; for example, as age rises from 20 to 30, potential wages for males and females rise by 15% and 18% respectively.

The variable included in the multinomial logit is the predicted value from the wage equation. Over time, it is updated as a respondent's age and other characteristics change.

Endnotes

[1] We do not focus on exits to institutional group arrangements, but should clarify how we categorize exits to college dormitories and military. In the literature, exits to institutions have been considered separate destinations (Goldscheider and DaVanzo 1985, 1989), or have been undifferentiated from parental living arrangements (Buck and Scott 1993). Whittington and Peters (1996) generally treat college students as residing with parents (unless self-supporting), but combine those in the military with those living alone in noninstitutional arrangements. Our study classifies college students and military members according to their current residence. We consider youths residing in dormitories, fraternities, or barracks to be in temporary quarters and classify them as not exiting the parental home. College students and military members living elsewhere are distributed among our destination categories (alone, married/partnered, or in a small or large group). Our conceptualization reflects a youth's choice to reside in a particular living arrangement rather than the choice to enter college or the military.

[2] The critical Chi-squared value at the 0.01 level with 25 degrees of freedom is 45. Twice the difference in log likelihood values comparing the pooled model to the sum of the gender specific models is 126. These results clearly reject pooling the male and female samples.

[3] In the sample of 26,553 youths, missing values occur most often for wages, housing costs, and the measure of the mother's intellect (12%, 11%, and 15% of the sample, respectively).

[4] Dwelling cost is derived from the Freddie Mac-Fannie Mae (FF) repeat sales house price index, augmented by data from the American Chamber of Commerce Research Association (ACCRA 1993). The FF index covers more than 100 MSAs and all states and is a pure time series price index. We use the 1982 ACCRA data for 88 MSAs and rural areas in 50 states to develop a baseline cross-sectional price index. The final index is developed by applying the FF index to the ACCRA data, yielding a nominal house price index with excellent spatial coverage.

[5] We experimented with age thresholds other than 18 but found 18 yields the best fit.

[6] A respondent is eligible if there is at least one own-child living in the household and the respondent is not married. The maximum benefit is the amount of assistance a family would receive if it had no income (Committee on Ways and Means 1996). We select this measure because it is exogenous; that is, it is invariant to the respondent's choices of participation in the AFDC program and supply of labor.

[7] We do not report multinomial estimation coefficients because their values are difficult to interpret; however, they are available from the authors.

[8] AFDC Eligible was interacted with Age 18, but the estimated coefficient is not significant.

[9] We found no impact of including a variable interacting Unemployment with Age 18.

[10] We tested for differing impacts depending on the age of the respondent, but failed to find supportive evidence.

[11] These calculations include the effects of changing age, age squared, and the age interaction terms with house price and wage.

[12] The assumptions include: the youth stay in school until age 18 and leaves with a high school degree. The youth lives in an urban area in the southern U.S. where the housing cost equals the sample's mean and the unemployment rate is eight percent. The youth's parents have 12 years of education. The youth has good health, no children, no stepmother or stepfather, is not Catholic but attends church at least once per month, is not first born, has two resident parents, and is not AFDC eligible. The youth has one sibling in the parental home and one out until age 24 when both siblings are out of the parent's home. Wages also are set by the base case assumptions and vary as we change the values of explanatory variables.

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