Economic Conditions and Children's Living Arrangements

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March 15, 2005

This paper was prepared for the National Poverty Center project, "Working and Poor: How Economic and Policy Changes Are Affecting Low-Wage Workers." We would like to thank Rebecca Blank, Sheldon Danziger, Robert Schoeni, and participants at the Working and Poor pre-conference in Ann Arbor, MI for input on preliminary findings. Oded Gurantz provided excellent research assistance. This draft was prepared for the 2005 Population Association of America's annual meeting, Philadelphia, PA.

Introduction

Household and family living arrangements have become increasingly visible in public policy discussions. With the passage of the landmark Personal Responsibility and Work Opportunity Reconciliation Act of 1996, household and family living arrangements gained new notoriety. The law's goals, which responded to a trend of increasing rates of childbirth outside of marriage, primarily focused on the reinforcement of marriage as the preferred arrangement for families with children. The focus on marriage was partly justified by research indicating that children who grow up with married parents fare better later in life than those growing up with a single parent (McLanahan and Sandefur 1994). Even after controlling for income and other intervening factors, children living with single parents have worse educational and family formation outcomes than those living with two parents or with step-parents. Children of divorced parents similarly fare worse than those in intact families on these and other measures (Amato 2000; Seltzer 1994).

Demographic shifts in living arrangements, however, have led to fewer children living with married people over time. For instance, between 1985 and 2000, children became less likely to live with married parents, and more likely to live instead with a single mother, particularly one who cohabits with an unmarried partner (who may or may not be the child's biological father) (Dupree and Primus 2001). These trends were especially strong for poor children. A similar trend is seen in adult living arrangements, showing increases in cohabitation over this same time period (Bumpass and Lu 2000; London 1998).

PRWORA made specific attempts to influence children's living arrangements beyond a focus on marriage favoring multi-generation households in some cases. The Act mandates that teen parents who have not completed high school live with a parent or an approved guardian and

remain in school in order to receive benefits. Although the population of children affected by this aspect of the law is small compared to the number who might be affected by marriage provisions, the focus on living arrangements beyond marriage is a new mechanism for using policy to affect family formation outcomes.

A widely recognized reason for these changes is shifts in societal and personal beliefs regarding marriage, divorce, and cohabitation that have occurred since the 1960s. Less traditional views have taken root, and as a result families are less stigmatized by divorce and cohabitation than they would previously have been. In particular, sexual intimacy, childbearing and child rearing have become increasingly acceptable outside of marriage (Thornton and Young-DeMarco 2001). Another documented reason for shifts in family living arrangements is the imposition of welfare waiver programs in the 1990s, culminating with the 1996 welfare reform bill (Acs and Nelson 2004; Bitler, Gelbach, and Hoynes 2003; Schoeni and Blank 2000). In general, the research indicates that welfare reforms have had results consistent with the goal of increasing two-parent or married families, at least for some subgroups. The effects tend to be small, however, due in part to the short time period in which these reforms were implemented.

Fluctuations in the economy represent a third and unexplored potential cause of movements in the distribution of living arrangements over time. There are several reasons to expect that economic conditions would affect the distribution of living arrangements. First, economic recessions place financial pressure on families, which might lead to doubling up, through marriage, cohabitation, or living with other unrelated or related adults or families. At the same time, job loss may create financial hardship, leading to increased rates of marital dissolution. It is possible that these effects can offset each others, at least partially. The converse of these arguments is that if parents tend to prefer living independently over living in

shared non-marital arrangements, economic expansions might lead to more independent arrangements. Finally, economic conditions may affect the attractiveness of potential partners. For instance, in a review of the relevant literature, Fein et al. (2003) find evidence that men's economic status affects union formation for both African-Americans and whites.

In this chapter, we explore the role that economic conditions, measured by the unemployment rate, play in determining the distribution of children's living arrangements. We use data from the 1979-2004 Annual Demographic Files of the Current Population Survey (CPS) and the 1986-2001 panels of the Survey of Income and Program Participation (SIPP). The long time period and large sample sizes of the CPS allow us to examine the relationship between economic conditions and living arrangements over the past 25 years and for several subgroups of children. Using panel data from the SIPP, we examine the effects of economic conditions on transitions into and out of living arrangements. Economic conditions may have larger effects on flows into and out of living arrangements than on the stock of living arrangements.

Previous Studies

The previous literature on family living arrangements has focused on two broad questions. First, what are the consequences for children of living in different household structures, or changing structures over time? And, second what demographic trends and policy changes have affected the distribution of living arrangements over time? We focus on the second question in the empirical analysis below, but briefly review the literatures on both questions to provide context and motivation.

A large body of previous research provides evidence that the composition of children's households affects their outcomes later in life and as such, childhood living arrangements can

provide important information about young adult and adult economic and family circumstances. In their 1994 book, McLanahan and Sandefur provide evidence indicating that children who grow up with a single parent fare worse than their counterparts who grow up with married parents. In particular, children of single parents have lower educational achievement, higher rates of teen birth (women), and higher rates of adult idleness (men). Furthermore, children of single or divorced parents are more likely than those in married parent families to leave home at an early age (Cherlin, Kiernan and Chase-Lansdale 1995); have intercourse at an earlier age (Kiernan and Hobcraft 1997); have a non-marital teen birth (Cherlin, Kiernan and Chase-Lansdale 1995); form adult unions with lower rates of success (Teachman 2004); and have other behavioral problems and health vulnerability (Dawson 1991).

Single parent families are complex and not all living arrangements are associated with similarly negative outcomes for children. For instance, Deleire and Kalil (2002) show that children who live in multi-generational families with a single parent and at least one grandparent have developmental outcomes that are on par with children from married couple families. With young parents in particular, multi-generational families can provide positive parenting support (Chase-Lansdale, Brooks-Gunn, and Zamsky 1994). Children living in stepfamilies with a divorced parent who is remarried tend to fare at least as bad as those with an unmarried single parent (McLanahan and Sandefur 1994). Children have become increasingly likely to live with a parent and unmarried cohabitor over the past two decades. Cohabitation is a less stable arrangement than marriage, however, and as a result children living in cohabiting families are more likely to experience family instability (Bumpass and Lu 2000).

Family instability has the potential to lead to residential moves for children, which are specifically associated with worse child outcomes. For instance, Astone and McLanahan (1994)

show that children in single parent families and stepfamilies are nearly twice as likely to experience a childhood move as children in married parent families. Mobility is a key contributor to the lower educational attainment for children in these non-intact families (Astone and McLanahan 1994; Crowder and Teachman 2004). Higher rates of childhood living arrangement transitions are also associated with increased risk of early premarital intercourse (Albrecht and Teachman 2003). Adverse effects of living arrangement transitions may be because children who move are likely to have weaker connections to their community, including their peers and neighbors, and therefore less social capital than children who do not move (McLanahan and Sandefur 1994).

The findings from this literature provide substantial evidence that children's living arrangements are important determinants of their future outcomes. These findings provide a motivation for the second stand of literature focusing on identifying the determinants of living arrangements. Previous research has considered a number of determinants, but has focused most specifically on the role of welfare benefits and reforms on family or child living arrangements. The most recent papers examine the effects of the 1990s welfare waivers and late 1990s TANF implementation on living arrangements. These studies generally rely on state differences in the timing and type of pre-PRWORA welfare waivers and TANF policies to identify their effects. For instance, Bitler, Gelbach, and Hoynes (2003) find that welfare reform over the 1990s shifted the distribution of living arrangements for specific subgroups, and in sometimes unexpected ways. African American children were more likely to live without their parents as a result of reforms. Latino children were more likely to live with married parents. Corroborating these findings, Brandon and Fischer (2001) find that children living in states with lower welfare benefits have higher rates of separation from their parents. Two types of reforms are primarily

responsible for observed shifts in living arrangement distributions: increased child support enforcement (Acs and Nelson 2004; Jagannathan 2004) and family caps (Acs and Nelson 2004). Both serve to increase the percent of children living with two parents (married or not). Schoeni and Blank (2000) also find that pre-PRWORA waivers lead to small increases in marriage with commensurately small decreases in female headship, particularly among lesser educated women. However, Fitzgerald and Ribar (2004) find little evidence that waivers affected female headship decisions. The effects of welfare waivers and TANF on marriage and divorce is also of concern, particularly in light of the goals of PRWORA to reduce nonmarital childbearing and encourage marriage. Random assignment evaluations of welfare waivers have generally found little effects overall. Recent work using vital statistics data shows that welfare waivers and TANF have slowed entry into marriage, but also reduced divorce (Bitler, Gelbach, Hoynes and Zavody 2004).

Although these studies have controlled for economic conditions in their analyses, they typically concentrate on a the time frame in which welfare waivers and TANF were implemented, which may not be long enough to understand how changes in the business cycle affect child living arrangements. There has been some recent attention to the effects of the economy on family living arrangements and evidence suggests that the economy may indeed play a role in living arrangement decision-making. Lichter, McLaughlin and Ribar (2002) find that the retreat from marriage was not counteracted by the economic expansion of the 1990s, although the expansion did serve to slow the decline that might otherwise have occurred. London (2000a) and Winkler (1992) demonstrate that housing costs are important factors in single parents' living arrangement decisions at a point in time. Studies also indicate that the

generosity of welfare benefits in a state is a key factor in determining single parents' living arrangements (London 2000a; Folk 1996; Winkler 1992).

Although the literature on children's living arrangements has yet to establish a link between economic conditions and household composition for children, there is an established literature that documents the effects of financial stress on marriage outcomes. Conger et al. (1990) demonstrate that economic pressure affects how married couples interact with each other, and in particular leads to more hostile interactions. These hostilities can result in divorce, and a number of studies have demonstrated this effect. In a review of this literature, White and Rogers (2000) find consistent evidence that in married couples, a spell of unemployment for the husband doubles the rate of divorce. Income loss is particularly troubling for African-American families relative to whites, whose divorce response to this loss is two to three times larger than whites' (Yeung and Hofferth 1998). There is mixed evidence on the effects of wives' unemployment on marital stability (White and Rogers 2000). Some studies indicate that higher earnings among women leads to stability in the marriage, but others find that higher wages and rates of employment lead to an increased probability of divorce. Generally, the literature finds that economic factors play a larger role in the marital instability of African-Americans than whites.

Data and Living Arrangement Definitions

We use data from two sources in this paper: the 1979-2004 Annual Demographic Files of the Current Population Survey (CPS) and the 1986-2001 panels of the Survey of Income and Program Participation (SIPP). Both sources of data span a long time frame, offering information about periods of low and high unemployment. Using the CPS, we examine the effect of economic conditions on the distribution of children's living arrangements over a 25-year period.

We also explore the relationship using a more detailed set of living arrangements over the past 15 years. Using panel data from the SIPP, we examine the effects of economic conditions on annual changes in children's living arrangement status over the past two decades. We discuss each dataset and our living arrangement definitions in more detail below.

The Current Population Survey

The Annual Demographic File (ADF) of the CPS is conducted annually in March by the U.S. Bureau of the Census and the Bureau of Labor Statistics and is representative of the entire U.S. population containing observations for more than 130,000 people. The CPS collects information on every member of the household, and catalogues the relationship of each of the members to the household head. By examining these relationship codes and the characteristics of the household members, it is possible to create a set of detailed living arrangements that capture whether children live with married parents or an unmarried parent, and the presence of other adults in the household, as well as the relationship, if any, with the child's parent. Using this information for the entire 1979-2004 period, we examine three categories of living arrangements:

- Children living with married parents and no other adults in the household[1];
- Children living with an unmarried parent and no other adults in the household; and
- Children living in all other arrangements, including without any parents.

Beginning in 1989, the CPS provides a more detailed set of household relationship codes that allow us to expand our living arrangement categories as follows:

- Children living with married parents and no other adults in the household;

[1] Adult children of the parents who live in the household are not considered other adults. If a child lives in a household with his or her parents and an adult sibling, that child is categorized as living with married parents.

- Children living with an unmarried parent and no other adults in the household;
- Children living with an unmarried parent and the parent's cohabitor, who may also be the child's parent or have his or her own children in the household as well;
- Children living with married or unmarried parents and one or more grandparents;
- Children living with married or unmarried parents and other related or unrelated adults (who are not cohabitors or grandparents); and
- Children living in households that do not contain a parent.

It is important to note that prior to 1996, the CPS did not explicitly identify cohabitors. We rely on methodology used in London (1998) to identify potential cohabitors. Specifically, people classified as cohabiting must be of the opposite sex, be unrelated and unmarried, and be within 10 years of age of each other. The introduction of explicit codes for cohabitors in 1995 allows us to examine the efficacy of these assumptions. We find some undercounting of cohabitors in earlier years, but a smooth upward trend in the rate of children living with cohabitors that is consistent with the cohabitation trends identified in the literature during this time period. We include code change dummy variables in our main specifications that identify 1995 as a year of change. The CPS was also redesigned in 1994, changing many of the basic questions. We include a code change dummy for that year as well.

We limit our sample to children who are not households heads, spouses or cohabitors. We further limit our analysis to children ages 3 to 15 for several reasons. First, it is possible the childbearing is also associated with changes in economic conditions, and we want to make sure that we do not confound the effects of economic conditions on childbearing and living arrangements. Limiting the analysis to children over age 2 should reduce this problem. We limit the analysis to children under age 16 because we do not want to include teen parents in our

sample of children. Their living arrangement decisions are likely to be based on criteria that do not apply to the remainder of the sample. The children of teen parents are included in the sample. Second, young people over age 15 may decide to leave home for a variety of reasons that are related to their own personal preferences and hence not applicable to other children (for a review of the home leaving literature, see Goldscheider 1997). Models were tested that include all children ages 0 to 17 with similar results.

The Survey of Income and Program Participation

The SIPP was created jointly by the Department of Health and Human Services and the Bureau of the Census to be a major source of information on demographic and economic conditions in the United States. It is a longitudinal survey that interviews respondents every four months for a period of 24 to 48 months for the panels we use. During each interview, respondents are asked to recall their activities over the prior four months creating monthly data. The earliest SIPP panel began in 1984, but we exclude the 1984 and 1985 panels because the relationship to head codes we use to create living arrangements are less detailed than in the later years. We also exclude the 1989 panel because it does not cover a full year. With the 1986-2001 SIPP panels, we are able to create a more detailed set of living arrangement codes similar to the set of living arrangements defined in the CPS.

The SIPP is household based survey. Original adult household members are followed throughout each panel, even if they leave the household. Original child household members are only followed if they continue to live with an original sample adult. For example, if a child moves from a parent's household to a grandparent's household, the child is not re-interviewed until he or she returns to her parent's household. As a result, we cannot follow moves from

parental to non-parental homes. We therefore omit children who live without their parents at any point in the panel months we examine. We instead concentrate on the vast majority of children who continue to live with at least one parent even when the composition of others in the household changes.

The SIPP also experienced a coding change for the 1996 panel. In particular, for the 1996 and 2001 panels, individuals who are unmarried cohabitors are coded separately from other unrelated roommates. Prior to this, unrelated roommates and cohabitors are coded together. In the earlier panels, we considered anyone who was an unrelated roommate/cohabitor of the opposite sex and appropriate age group a cohabitor.

We concentrate on one-year transitions in living arrangements, for example comparing each child's living arrangement in their wave 1-month 4 interview to their living arrangement in their wave 4-month 4 interview. Similarly, we compare living arrangements from the wave 4-month 4 interview to those in the wave 7-month 4 interview. In 1996, we also compare their wave7-month 4 interview living arrangements to their wave10-month4 living arrangements. We use the interview in month 4 of each wave to minimize recall bias.

As with the CPS, we limit children to those who were between the ages of 3 and 15 at the time of their first interview and are not household heads, spouses or cohabitors. We also separately exclude children who are or become teen parents during the panel. We also exclude children who live in states that are not uniquely identified by the SIPP.[2]

[2] In the 1996 and 2001 panels, these states are: Maine, North Dakota, South Dakota, Vermont, and Wyoming. Prior to 1996, Alaska, Idaho, Iowa, and Montana were also not uniquely identified.

Measures of Economic Conditions and Welfare

We use state-level unemployment rates to measure the economic conditions in a particular year. In the CPS, we use the annual unemployment rate corresponding to the year prior to the March interview. In the SIPP, we use the seasonally adjusted monthly rate that corresponds to the month in question. We also create dummy variables indicating the presence of a welfare waiver in the state during the period of the interview and whether or not TANF had been implemented in the state.[3] As noted previously, a growing literature examines the effects of welfare waivers and TANF implementation on living arrangements. These variables turn on and off during the period between 1993 and 1998; before 1993 there were no waivers, and after 1998 all states had implemented TANF. We also include the maximum state welfare benefit available to a family of three in each year, adjusted to 2004 dollars.

Empirical Model

To explore the effects of economic conditions on children's living arrangements we estimate several models of living arrangements. The probability of living in a particular arrangement can be expressed as:

$$(1) \qquad L_{ist} = \beta X_{ist} + \delta U_{st} + \chi S_{st} + \gamma T + \alpha_s + \varepsilon_{ist,}$$

where L_{ist} is one of six potential living arrangements, X_{ist} are individual-level characteristics of the children, U_{st} is the state-level unemployment rate, S_{st} are state-level controls for maximum welfare benefits and waiver and TANF implementation; T is a time specification (discussed in more detail below), α_s are state fixed effects, and ε is the error term.

[3] These dummy variables are coded using information provided in the report *State Implementation of Major Changes to Welfare Policies, 1992-1998* (U.S. Department of Health and Human Services 1999).

In X_{ist}, we only include children's characteristics as control variables because of concerns about the endogeneity of the characteristics of adults in the household and the children's living arrangements. We include the children's age, race and ethnicity, and sex in all models. We also include a measure of urbanicity—central city status in the CPS and metropolitan area status in the SIPP.

Children's living arrangements might respond to economic conditions in a variety of ways. For example, in periods of high unemployment when families may be feeling economic pressure, they may be more likely to double up with others (London 2000a). Families with one parent may opt to share a household with other family members or a cohabitor in order to share expenses. At the same time, job loss and economic pressure can create marital problems, leading to marital breakup and resulting in fewer children living with married parents (Conger et al. 1990; Yeung and Hofferth 1998; White and Rogers 2000). Slack labor markets may also have an effect on the attractiveness of potential spouses by increasing unemployment and lowering wages. Hence, in relatively high unemployment period, we might expect to see some offsetting trends. At the same time, we might find marital dissolution and worsening marriage markets, leading to increases in children living alone with one parent, we might also see increased doubling up, which would decrease the share of children living alone with one parent.

In the stock model that examines trends over time in living arrangements, we use data from the CPS to test the extent to which variation in unemployment rates across states and over time has affected the distribution of living arrangements. We separately model the probability of each living arrangement using weighted probit models. We are most interested in the magnitude of the estimated coefficient δ, which demonstrates the effect of unemployment rates on the probability of living in a particular arrangement. Because we rely on state-level unemployment

rates as our measure of economic conditions, standard errors are corrected for serial correlation using state-level clustering (Bertrand, Duflo, and Mullainathan 2002; Kezdi 2002).

The previous model captures the effects of economic conditions on the stock or net flows of living arrangements, however, the effects may be stronger on the flows into and out of living arrangements. For example, recessions may both increase flows into single parent households through martial dissolution and increase flows out of single parent households because of financial pressure. These dynamic effects may result in a small or nonexistent response of the stock measure to changes in the economy.

We define transitions over a one-year period. The probability of the child making a living arrangement transition can be expressed as:

$$(2) \qquad LT_{ist} = \beta X_{ist} + \delta U_{st} + \chi S_{st} + \gamma T + \alpha_s + \varepsilon_{ist}.$$

We use weighted probits to model the probability of transitioning from any living arrangement to any other living arrangement, and we also focus on transitions between children living with married parents and single parents in the base year. As with the stock models, standard errors are corrected for serial correlation across states.

It is important to note that family living arrangements changed tremendously over the time period we are examining. As mentioned previously, in the last two decades of the 20th century, children became less likely to live with married parents, and more likely to live with a single parent, particularly one who was cohabiting with an unrelated partner. It is likely that some portion of these trends is the result of changes in societal norms, including a less stigmatizing view of divorce and non-marital cohabitation. It will be important to ensure that our estimates of the effects of unemployment levels on living arrangements and living arrangement transitions are purged of these underlying trends. We therefore experiment with several

specifications aimed at controlling for the underlying trends. We estimate models that include linear time trends, quadratic time trends, code change dummy variables (that refer to the timing of survey code changes in the data), and year fixed effects. As discussed below, the results are qualitatively similar. We therefore include a quadratic time trend, as well as code change dummy variables, in most models.

Trends in Living Arrangements and Living Arrangement Transitions

Figure 1 compares children's living arrangements in the CPS with the national unemployment rate from 1979-2004. Using the less detailed living arrangement definitions available over this period, the long-term trends clearly indicate a movement away from living with married parents to living with a single parent and other arrangements. The percent of children living with married parents fell from 72 percent in 1979 to 62 percent in 2004. At the same time, the percent of children living with a single parent (and no other adults) increased from 14 percent to 17 percent and the percent of children living in any other arrangement increased from 15 percent to 21 percent. This is largely the result of the increase in non-marital cohabitation over this time period.

Although the long-term trends in living arrangements are evident in Figure 1, a clear relationship between unemployment rates and living arrangements does not emerge. Figures 2-7 separately chart trends in the more detailed measures of living arrangements between 1989 and 2004. Over this time period, the decline in marriage is quite evident (Figure 2), and does not appear to correspond strongly to fluctuations in the unemployment rate. The decline in marriage occurs both during periods of high and low unemployment, although the trend in the percent of

children living with married parents is somewhat flat in the late 1990s when unemployment hit its low point and started to rise again.

The trend in the percent of children living with a single parent (and no other adult) also does not appear to be strongly related to unemployment (Figure 3); the trend remained largely flat throughout the period. However, between 2000 and 2004, changes in percent of children living with a single parent do follow a similar trend to the unemployment rate. There was a small decline in the percent of children living with a single parent when unemployment was low, and a slight rise in this percent as unemployment rose. This relationship is not consistent with the prediction that single parent families would begin to double up, and hence decline as a share of the overall distribution during high unemployment periods.

Figure 4 displays the steady increase in cohabitation over the period from 2 percent to over 4 percent. These estimates also do not provide evidence of a strong correlation between the percent of children living with a single parent and a cohabitor and the unemployment rate. The dip in the percent of children living with a single parent and cohabitor that occurs in 1994 is the result of a coding change in the CPS.

Between 4 and 5.5 percent of children live in multi-generational households during the time period (Figure 5). In the early 1990s, there was some correlation between unemployment rates and the percent of children living in multigenerational households (Figure 5). However, in more recent years the percent living in multi-generational households did not fluctuate with changes in unemployment. The percent of children living in other parental arrangements, with roommates, aunts or uncles, or others changes very little over the time period, and appears to be unresponsive to unemployment (Figure 6). Finally the last living arrangement we examine is children living with no parents (Figure 7). Although there is a jump in the percent of children

living in this arrangement between 1993 and 1994, this is the result of a coding change in the CPS. Rather, the trend is largely flat over the time period.

Figures 2-7 illustrate the overall trends in living arrangements, which likely respond to differences in societal norms as well as other factors, including economic conditions. Although dramatic changes do occur in the distribution of living arrangements over this time period, it is important to note that the vast majority of children continue to live with either married parents or a single parent and no other adults in the household. Between 1979 and 2004, the percent of children living in parent-only households fell from 86 percent to 79 percent. Trends differ by racial and ethnic background of the children, with white children far more likely over the period to live with married parents than African-American or Latino children (Table 1). Within these groups, however, there are some similarities in the trends in living arrangements. White, African-American and Latino children all experience declines in living with married parents, and increases in living with cohabitors. White and African-American children experience very small increases in the percent living with one parent only, but Latinos experience a sizeable decline in the percent in that arrangement. Each group experiences an increase in the percent of children living apart from parents, though for both African-Americans and Latinos, the 1996 percent is slightly higher than the 2004 percent.

Thus far, the reported estimates only capture the relationship between unemployment rates and living arrangements as they exist at a point in time. It is possible that even if economic fluctuations do not have a large effect on the overall distribution of living arrangements, perhaps due to the counteracting trends we hypothesized earlier, they might have a large effect on the probability of moving into or out of specific living arrangements. Figures 8 and 9 use data from the 1986 to 2001 SIPP panels to examine the probabilities of transitioning into and out of various

living arrangements. Note that even with overlapping panels, the SIPP does not cover each year from 1986-2002. Dotted lines in Figures 8 and 9 connect points across years for which we are missing data.

Between 8 and 10 percent of children change living arrangements over a one-year period. There is some fluctuation in these transition rates, but not necessarily in concert with fluctuations in unemployment. When we examine the types of transitions that occur, however, we find what appears to be a correlation with trends in economic conditions. Figure 8 graphs the transition rates into and out of married parent (only) households. The transition rate into a married parent living arrangement is defined for those not living in this arrangement in the base year. The jump in the trend for transitions into married parent households in 1996 is likely the result of a code change in the 1996 SIPP that affects how cohabitors are identified. Because we are better able to identify children living with cohabitors in 1996, movement from this arrangement into marriage is adjusted upward for 1996 and beyond. Removing this discontinuity and moving the line down accordingly, the trend would show a constant decline over the 1995 to 1998 period.

Figure 8 demonstrates that in the raw data, transitions out of marriage appear to be more correlated with unemployment changes than transitions into marriage, though neither maps onto unemployment perfectly. Note that a transition out of marriage may not always equate divorce or separation. Children moving from households that include their parents as the only adults into households that have other related or unrelated adults in them are also coded as moving out of married parent households.

Figure 9 shows that the same sort of trend can be seen in movements into and out of single parent households. This figure shows a clearer relationship between transitions out of single parent households and unemployment. Ignoring the jump in 1996 that results from the

code change, the transition rates out of single parent households appear to map closely to the unemployment rate. This is consistent with our theory, which predicts that in times of greater economic pressure, single parent households will be more likely double up by getting married, cohabiting, or sharing housing with other relatives or non-relatives. The converse does not appear to be true—transitions into single parenthood do not fluctuate with the business cycle.

The Effects of Economic Conditions on Children's Living Arrangements

Although the comparisons of trends in economic conditions and living arrangements are suggestive of potential effects, we need to control for other factors, such as the demographic trend away from marriage and the major changes that occurred in welfare over the past decade and a half. As discussed previously, we experiment with three models to parse the demographic trend from the effects of unemployment and other factors. Table 2 presents the results of these three models for the more detailed living arrangements in the CPS. We report marginal effects and their standard errors for probit regressions that also include dummy variables for child sex, age, race, central city status, welfare waivers and TANF implementation timing. All models also include the maximum welfare benefit for a family of three in each state and year as well as state fixed effects. Standard errors are corrected for the serial correlation associated with state-level unemployment rates.

Findings across the three models are very similar in both effect size and statistical significance. Our preferred model is the middle one that includes a quadratic time trend, and code change dummy variables for 1994 and 1995 when the CPS survey instrument changed. Theoretically, we expect societal preferences for living arrangements to follow a relatively smooth adjustment process. With this specification, we find that a 1 percentage point increase in

the unemployment rate over the 1989 to 2004 period is associated with a 0.43 percentage point decline in the probability of living with married parents. A comparable increase in unemployment is associated with a slightly large increase in the probability of living with a single parent (0.47 percentage points). We find no evidence that unemployment affects the probability of living in the other arrangements.

As discussed previously, children of different races or ethnicities have very different living arrangement distributions. We might also expect that the effect of economic conditions on living arrangements might differ by children's race or ethnicity. Table 3 presents marginal effects from probit models that separately estimate the effects of differences in unemployment over the 1989 to 2004 time period. For this and the remaining CPS and SIPP estimates, we estimate specifications that include a quadratic time trend and code change dummy variables.

Indeed, the estimates reported in Table 3 indicate different effects of unemployment on the distribution of living arrangements for white, African-American, and Latino children. The results for white children are similar to those for children as a whole; higher unemployment is associated with a lower probability of living with married parents and a higher probability of living with a single parent. Unemployment has no significant effect on the probability of living in the other defined arrangements. In contrast, unemployment has a smaller and statistically insignificant effect on the probability that African-American children live with two parents, and an even smaller effect on the probability that Latino children live with two parents. However, unemployment rates have a larger effect on the probability that African-American and Latino children live with a single parent than they do for white children. At the same time, higher unemployment results in decreased probabilities that African-American and Latino children will live in multi-generational households, with both at least one parent and at least one grandparent.

Higher unemployment is further associated with reduced doubling up with other relatives or non-relatives for Latino children.

The finding that higher unemployment is associated with distributional changes for minority children away from multi-family or other shared living arrangements and into single parent arrangements is inconsistent with the theoretical prediction that economic pressure would lead to doubling up with relatives or others. Unfortunately, we have little information in the CPS to help us understand why African-American and Latino families respond to economic pressure in these ways. One possibility is that families may be less likely to encourage siblings or friends to move in when economic uncertainty is present.

Another important finding is that the probability of cohabitation is not significantly related to changes in unemployment. The unemployment rate coefficient is statistically insignificant in the main specification (Table 2) and each of the specifications for racial groups (Table 3).

We next examine differences in the effects of unemployment on living arrangements for different age groups. We hypothesize that the distribution of living arrangements will be less responsive to the business cycle for young children than older children because parents of younger children might be more likely to stay married "for the sake of the children" than parents of older children. To investigate this issue, we estimate probit regressions for three age groups: 3-6, 7-11, and 12-15 (Table 4). The distribution of living arrangements across these three groups is slightly different, with older children more likely to be living with a single parent and younger children more likely to be living in multi-generation families. Despite this, the effect of unemployment on living arrangements is highly comparable across age groups and living arrangement categories. For each age group, higher unemployment is associated with a lower

probability of living in a married parent household and a higher probability of living in a single parent household. The effects of unemployment on other living arrangements are statistically insignificant for all age groups.

Using the CPS, the relationship between living arrangements and economic conditions can be examined over a longer time period which includes additional recessionary and growth periods. Estimates for probit regressions using data from 1979 to 2004 are reported in Table 5. Prior to 1989, however, it is impossible to identify all six living arrangements, and we thus concentrate on the main two living arrangements—living with married parents and living with a single parent. We group all other arrangements. In aggregate, we find results that are smaller than those over the 1989 to 2004 period. For instance, over the longer period a 1 percentage point increase in the unemployment rate is associated with a 0.19 percentage point decline in the probability of living with married parents, smaller than the 0.43 percentage point decline for the shorter time period. A comparable increase in unemployment is associated with a 0.09 percentage point increase in the probability of living with a single parent, compared to 0.47 percentage points over the shorter time period. Similar differences can be seen across race and ethnicity groups, with one exception. For Latino children, the effect of a 1 percentage point increase in unemployment is a 0.46 percentage point decline in marriage over the longer time period, and a 0.19 percentage point decline in the shorter time period. Although estimates for the longer time period are generally smaller and more likely to be statistically insignificant, they do not overturn the previous results.

Not shown in Tables 2-5 are estimates for the effects of welfare reform on the distribution of children's living arrangements. Included in all regressions are two welfare reform measures: a dummy variable indicating the timing of the implementation of a state welfare

waiver and a dummy variable indicating the timing of Temporary Assistance for Needy Families (TANF) implementation. All waivers were implemented during the 1992 to 1996 period, and all TANF programs were implemented between 1996 and 1998. Given the truncated period in which these programs occurred and the long time period we examine, we find little consistent evidence that waiver programs and TANF affect children's living arrangements in either the 1979-2004 or 1989-2004 periods.

The Effects of Economic Conditions on Transitions in Children's Living Arrangements

As noted previously, the static distribution of living arrangements may be less responsive to changes in economic conditions than the dynamic distributions of living arrangements. We now turn to estimating the relationship between unemployment and transitions into and out of living arrangements. Table 6 reports a five by five transition matrix of living arrangements in time 1 (on the vertical axis) and living arrangements in time 2 one year later (on the horizontal). Looking down the diagonal, one can observe that children living with married parents in time 1 are least likely to change living arrangements. Fewer than 5 percent are in another living arrangement one year later. Children living with a single parent and no other adults are the next least likely to change households, followed by those living in multi-generational households, children in cohabiting families, and children in all other arrangements.

The transition patterns are in line with other research indicating that when transitions occur, they are likely to progress toward independence (London 2000b). For example, much of the movement between family types is movement from arrangements in which parents live with other non-parental adults into arrangements where other adults are not present. The highest probability transitions occur when cohabiting unions dissolve or result in marriage, and when

families in shared housing arrangements begin to live without other adults present. Note that these transitions might entail a move on the part of the transitioning family, or the move of another household member out of the residence. Also note that the highest probability moves will certainly not coincide with the largest volume of transitions, which would necessarily occur from the two largest living arrangement categories—married parents and single parents.

To explore the effects of economic conditions on living arrangement transitions, we estimate probit regressions using the SIPP. Table 7 compares estimates from the CPS and SIPP using the stock living arrangement model (corresponding to time 1 for the SIPP). The CPS results are the same as those reported in the middle rows of Table 2. The control variables are largely the same except that the SIPP does not have a measure of central city status and instead we use a dummy variable indicating residence in a metropolitan area. Living arrangements are defined in the same way for both datasets, although we are unable to accurately measure transitions into and out of no parent households in the SIPP and therefore exclude that arrangement.

Results in Table 7 indicate some differences between the two datasets. First, the cohabitation rate we observe over the time period for children is lower in the SIPP than in the CPS. In both cases we are providing a rough estimate of cohabitation rates for the earlier years of the sample. The probability of living in other arrangements appears approximately equivalent. Comparing the estimates of the effects of unemployment on the probability of living in particular arrangements, we find much similarity with one major exception. Whereas in the CPS we found what looked like a tradeoff between married parent arrangement and single parent arrangements as unemployment increases, in the SIPP we find a tradeoff between single parent and multi-generational households. We find no impact of the effect of unemployment on the probability of

living with married parents. We were concerned that this might result from different time periods examined, but when we restrict the SIPP to 1989-2002 we find almost identical results. Note that the marginal effect for living in a multi-generational household in the CPS is in the same direction as the comparable marginal effect for the SIPP, though the SIPP estimate is larger and statistically significant.

Even if unemployment is unrelated to the stock measure of living with married parents in the SIPP, the trends displayed in Figures 8 and 9 suggest that unemployment may play a role in determining transitions into and out of this arrangement. Table 8 examines the effects of unemployment rates on transitions into and out of the two most prevalent children's living arrangements: living with married parents and no other adults, and living with a single parent and no other adults. Results indicate that in both cases, unemployment is positively related to the transition out of the arrangement, but not the transition into it. A 1 percentage point increase in unemployment leads to a 0.19 percentage point increase in the transition rate out of marriage and a 0.80 percentage point increase in the transition rate out of single parenthood. The positive coefficient estimate on the unemployment rate in the probit regression for transitions out of single parenthood contrasts with the negative point estimate in the static model. This is because the positive (but statistically insignificant) point estimate in the probit regression for transitions into single parenthood more than offsets the positive coefficient estimate for the transition out of single parenthood.

The results are somewhat different by racial and ethnic group, as shown in Table 9. For instance, Latino families are more responsive to unemployment in terms of entry into married parent households, but in an unexpected way. Higher unemployment is associated with lower rates of entry into married family households. White families are most responsive to

unemployment in transitions out of married parent households. None of the groups responds to unemployment in transitions into single parent households, however all groups show an increased probability to transition out of single parent households when unemployment increases. Latinos have the largest marginal effect.

Transitions into and out of other living arrangements show different patterns, as is shown in Table 10. The probability of transitioning into cohabitation, a multi-generation household, or another type of shared arrangement is very low, between 0.5 and 1 percent. The probability of transitioning out of these arrangements is far higher, ranging between 19 and 32 percent. Our results indicate that the only transition responsive to changes in unemployment is the transition into a shared household arrangement. When unemployment increases by 1 percentage point, the probability of children transitioning into these shared arrangements increases by 0.2 percentage points. The point estimate in the transition out of cohabitation regression implies that unemployment has a sizeable, but statistically insignificant at conventional levels, effect. An increase in the unemployment rate of 1 percentage point leads to a reduced transition out of cohabitation of 2 percentage points. Both these findings are consistent with theoretical predictions. When economic pressure mounts, families are more likely to double up, even if they do not change their marital status. Cohabitating parents may be less likely to marry, separate or move in with others when unemployment rates increase.

Conclusions

Previous research indicates that children's living arrangements and living arrangement transitions are important determinants of children's future well-being. The distribution of living arrangements has changed dramatically over the past 25 years, with children becoming

increasingly likely to live with a single parent, particularly one who cohabits with an unmarried partner, and less likely to live with married parents. This chapter has examined the role of economic conditions in the changing distribution of children's living arrangements and the transitions into and out of different types of arrangements.

Economic conditions are likely to influence children's living arrangements through three main avenues. First, economic pressure creates family stress, which can lead to marital dissolution. In other words, economic pressure can lead to divorce or separation. Second, economic pressure may create a need to double up with other adults in order to share household expenses. This doubling up could take a number of forms, including marriage, cohabitation, multi-generational households, and other shared arrangements. Finally, slack labor markets may reduce the attractiveness of potential spouses.

Our results provide some support for these hypotheses. In the stock model, which relies on data from the CPS, we find that higher unemployment results in a decrease in the probability children live with married parents (in single family households), and an increase in the probability they live with single parents (without other adults present). These results imply support for the first hypothesis—that economic pressure leads to marital dissolution. The findings do not appear to support the second hypothesis, however. This may be because the two theories can be offsetting in that an increase in marital dissolution can lead to increased percentages of children living in single parent families. At the same time, if we expect to see doubling up as a result of economic pressure, we would expect to see a reduction in this same population.

To address this issue, we model the probability of transition into and out of various living arrangements using data from the SIPP. We find that between 1986 and 2002, higher rates of

unemployment are positively associated with both transitions out of married parent and single parent living arrangements. This is in line with our expectations, and offers a mechanism by which we might expect economic pressure to act. For both married parent and single parent only families, economic pressure affects the probability of exit rather than the probability of entry. When we examine other living arrangements, we find that economic pressure is associated with an increased probability of entry into multi-generational households, which is consistent with our theory about doubling up.

We draw several conclusions from these findings. First, it appears that economic pressure is a determining factor of children's living arrangements, particularly in the movement to and from married parent and single parent families. Second, these findings differ by racial and ethnic subgroups. Findings regarding marital exit tend to be strongest amongst the group with the highest rates of marriage (whites), and weakest for the group with lowest marriage rates (African-Americans). In some models, Latino families respond in ways that are unlike white or African-American families. For instance, higher unemployment is associated with a reduced entry into marriage for Latinos, but not other groups. This is consistent with our theory, but we have no explanation for why Latinos would respond in this way but other groups would not. Finally, it appears that economic conditions are at least as important as welfare reforms in altering the distribution of living arrangements.

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Figure 1
Children's Living Arrangements 1979-2004

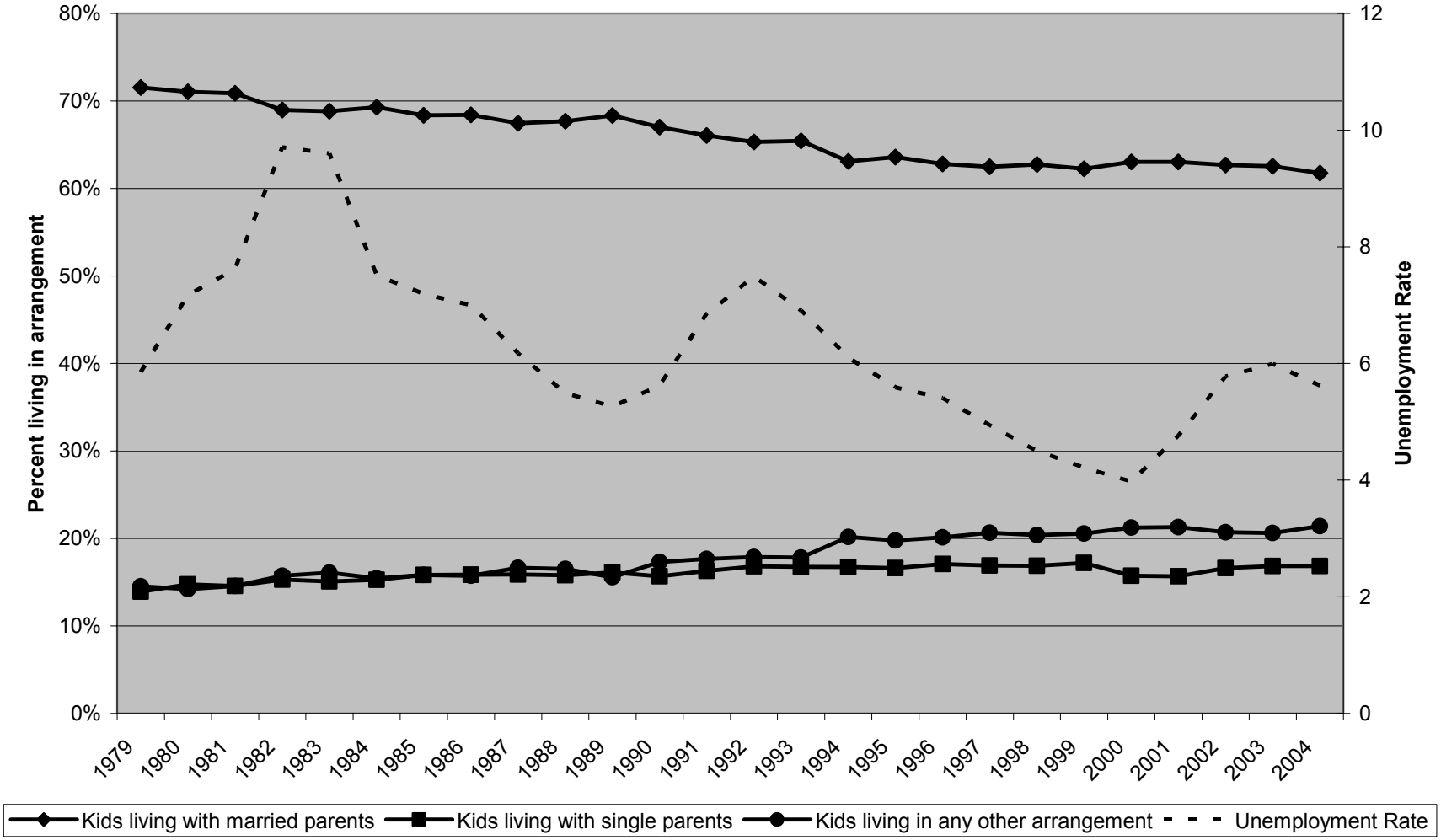

Figure 2
Children Living With Married Parents

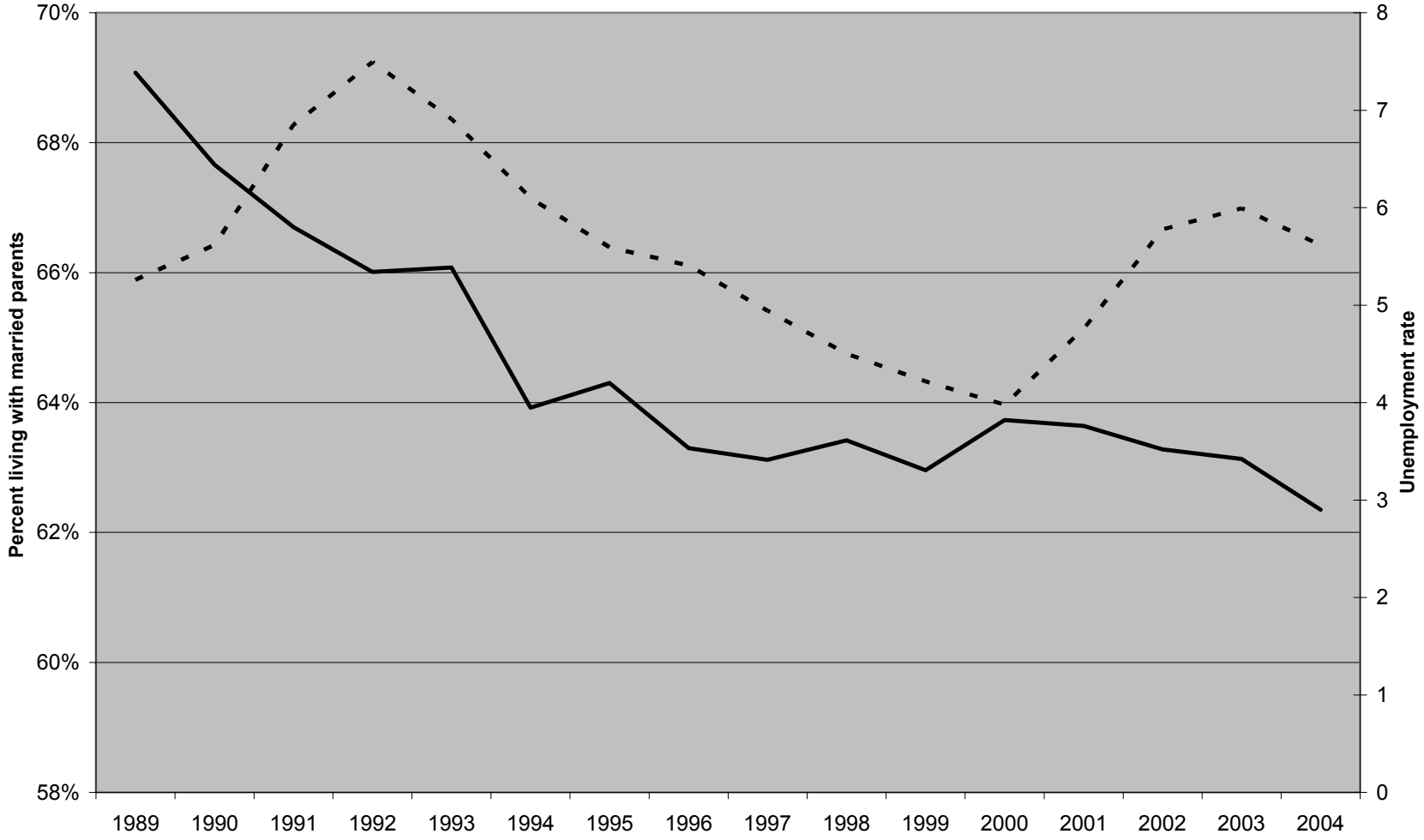

Figure 3
Children Living with a Single Parent

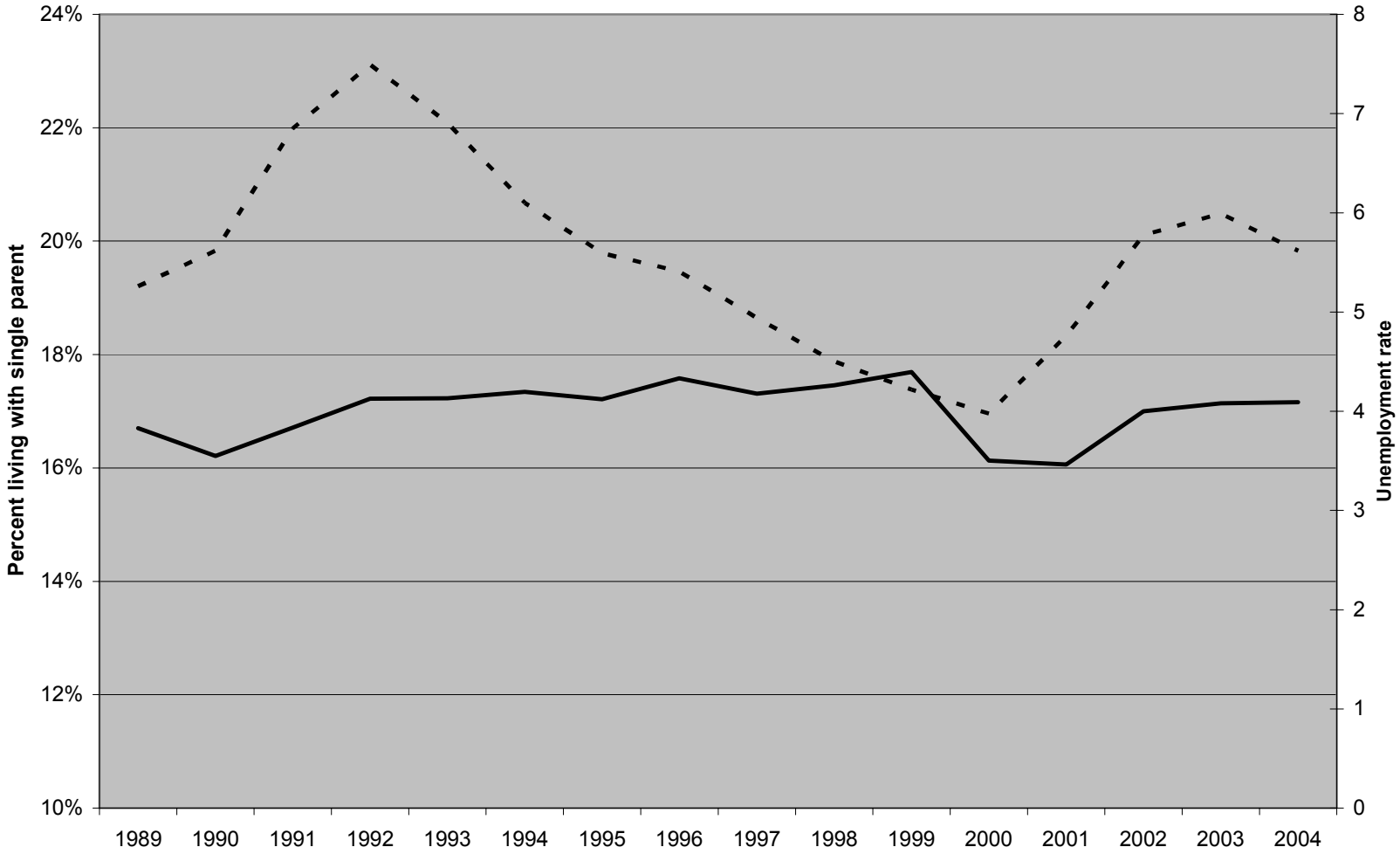

Figure 4
Children Living with a Single Parent and a Cohabitor

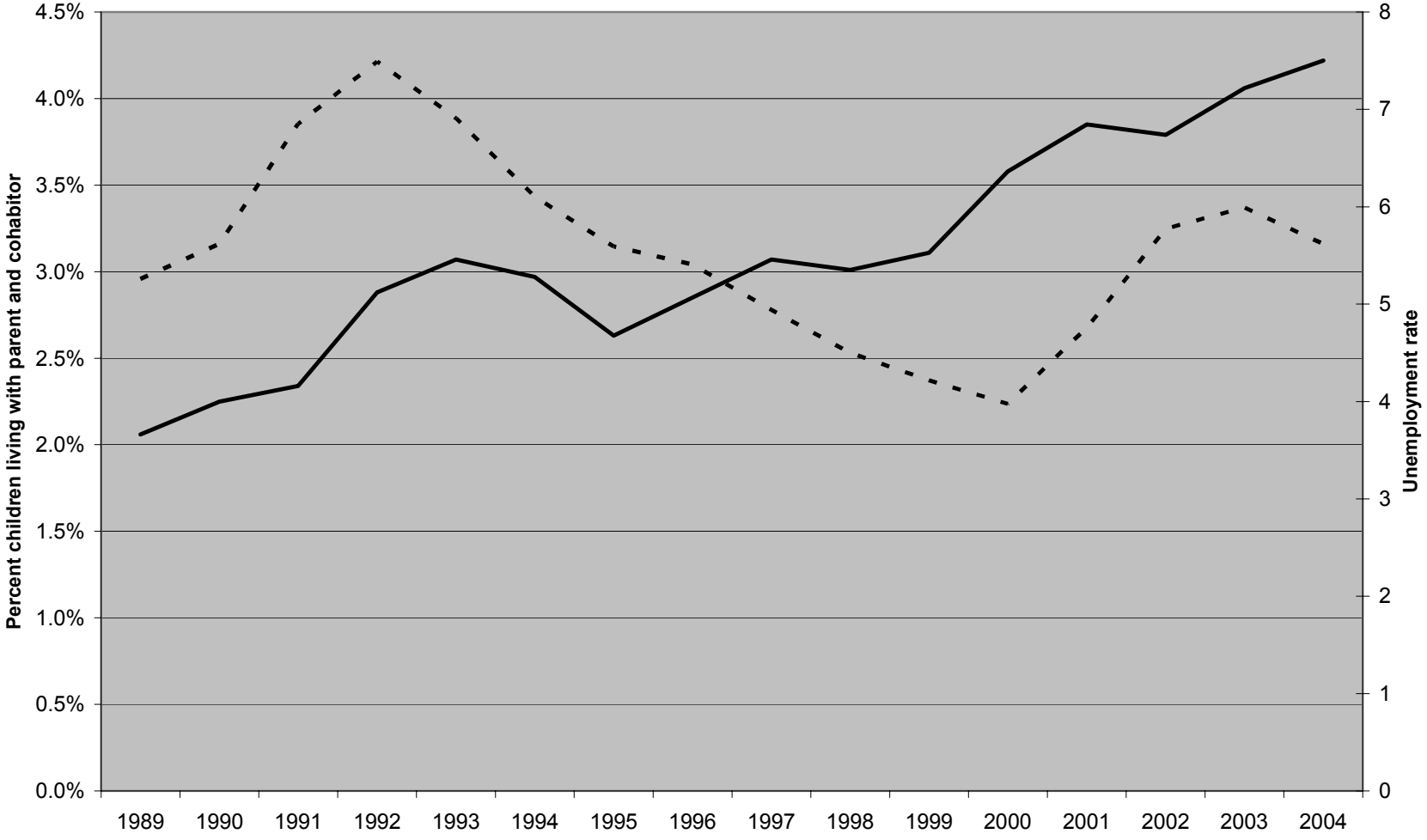

Figure 5
Children Living in Multi-Generational Households

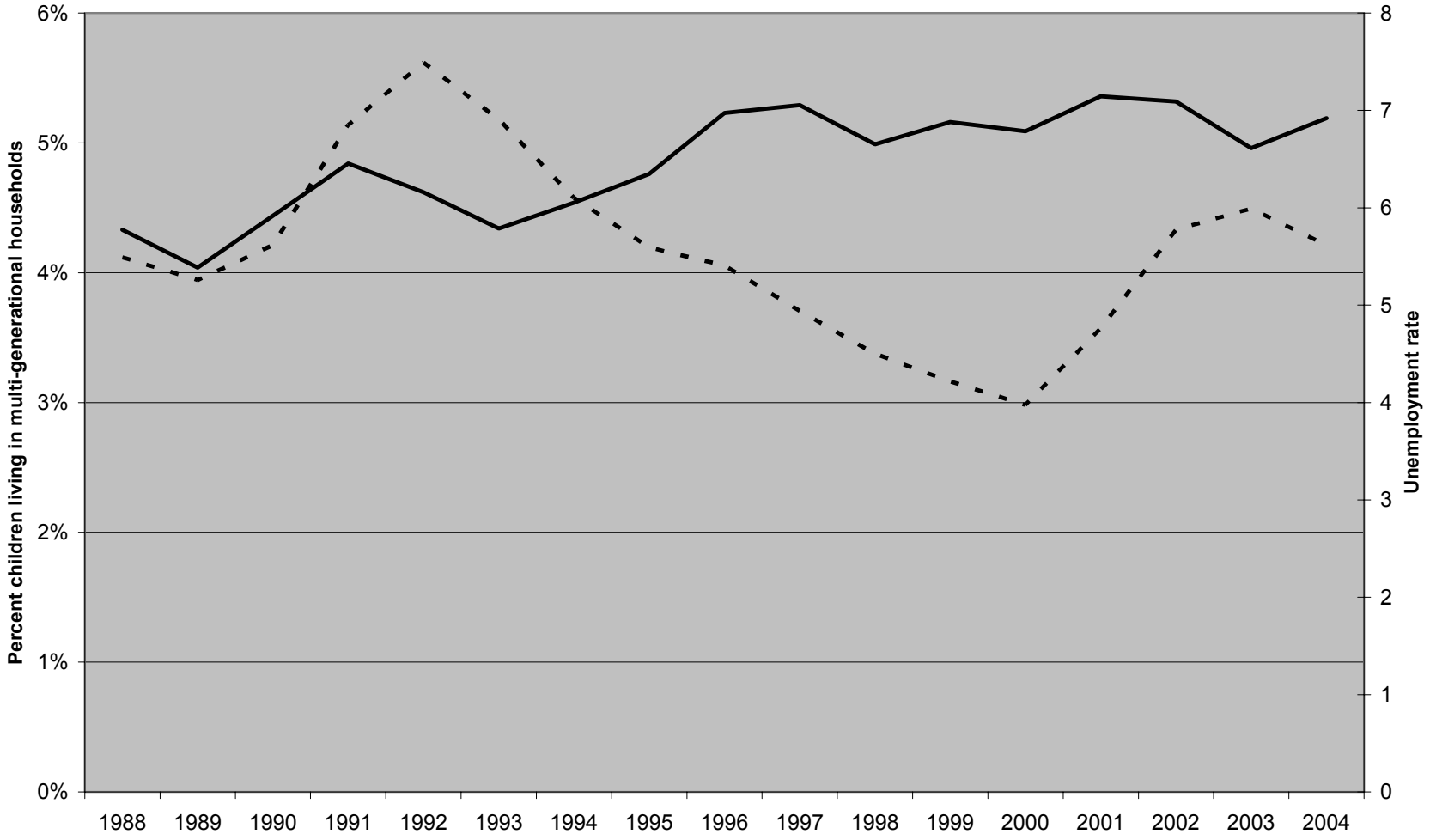

Figure 6
Children Living with Parent(s) and Other Relatives or Non-Relatives

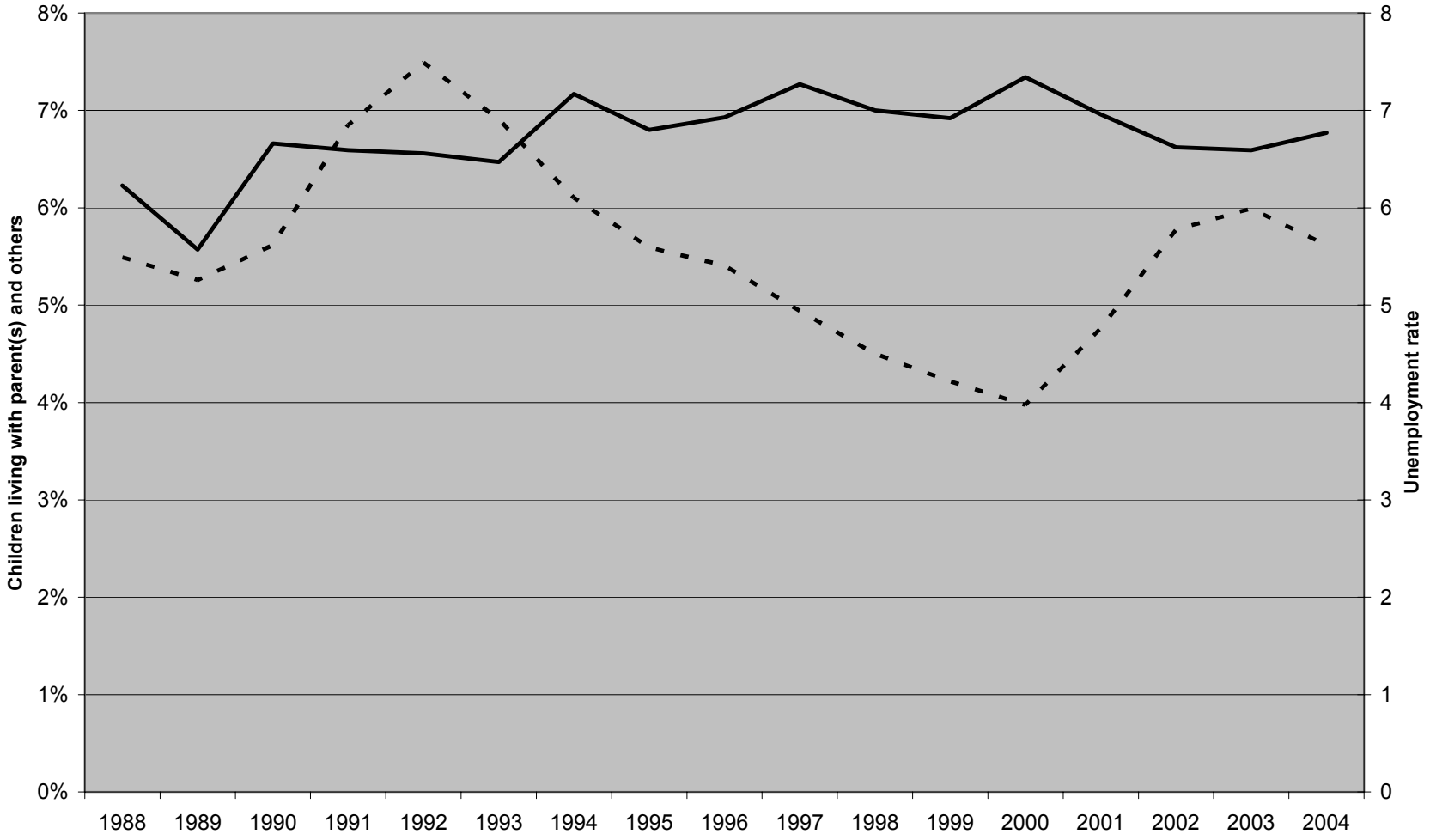

Figure 7
Children Living with No Parents

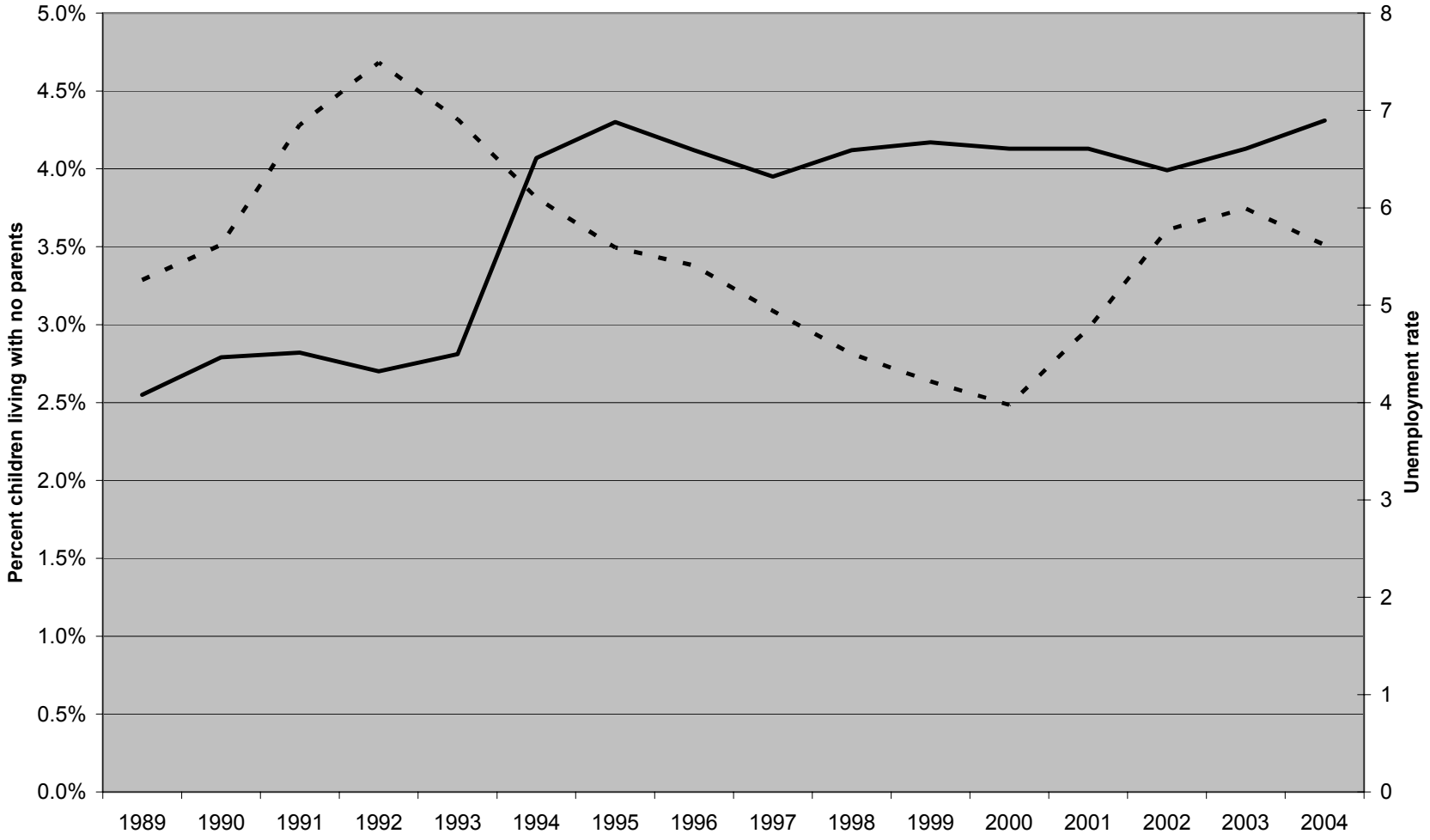

Figure 8
Transitions into and Out of Married Parent Households and Unemployment Rates

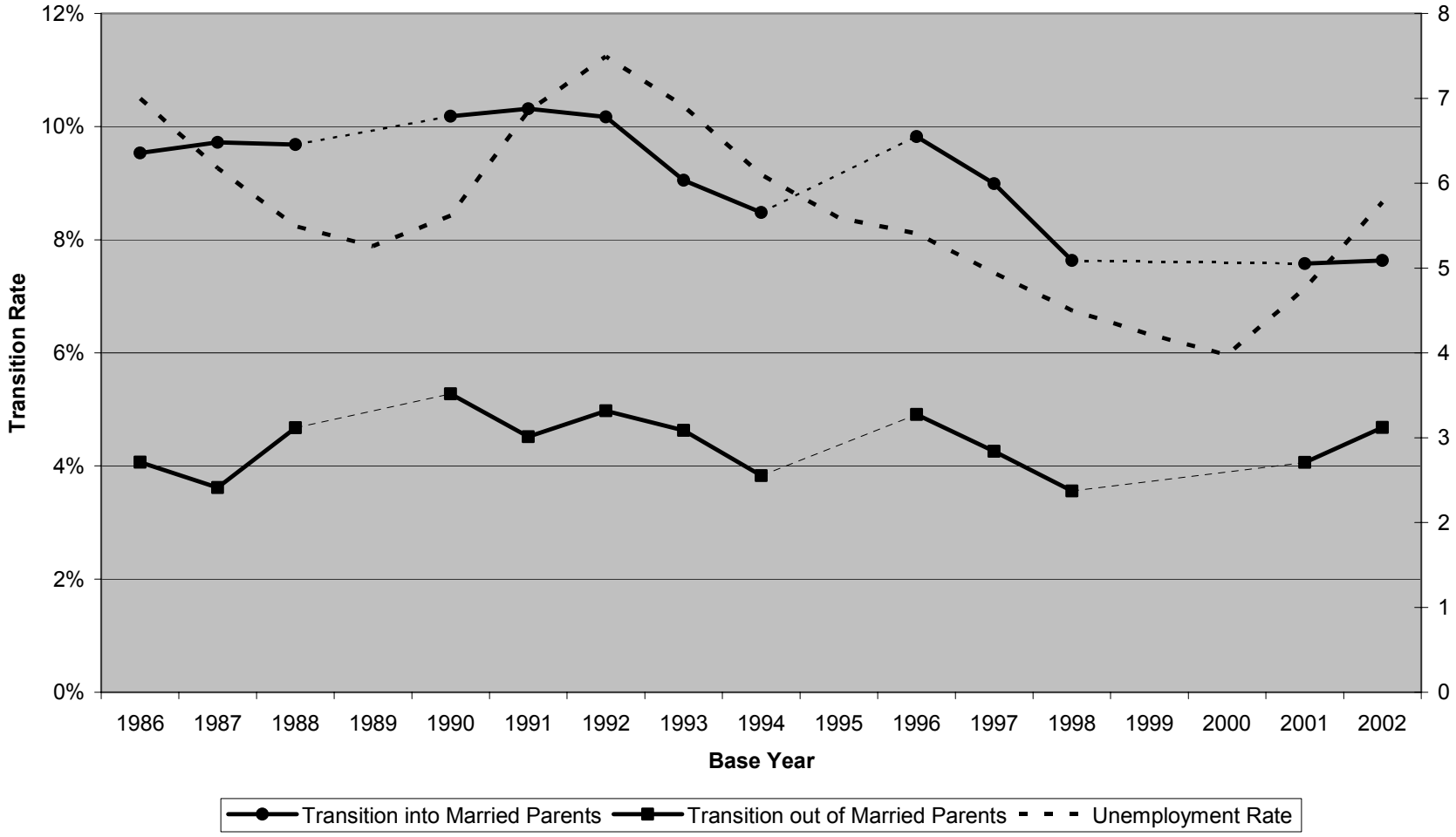

Figure 9
Transitions into and Out of Single Parent Only Households and Unemployment Rates

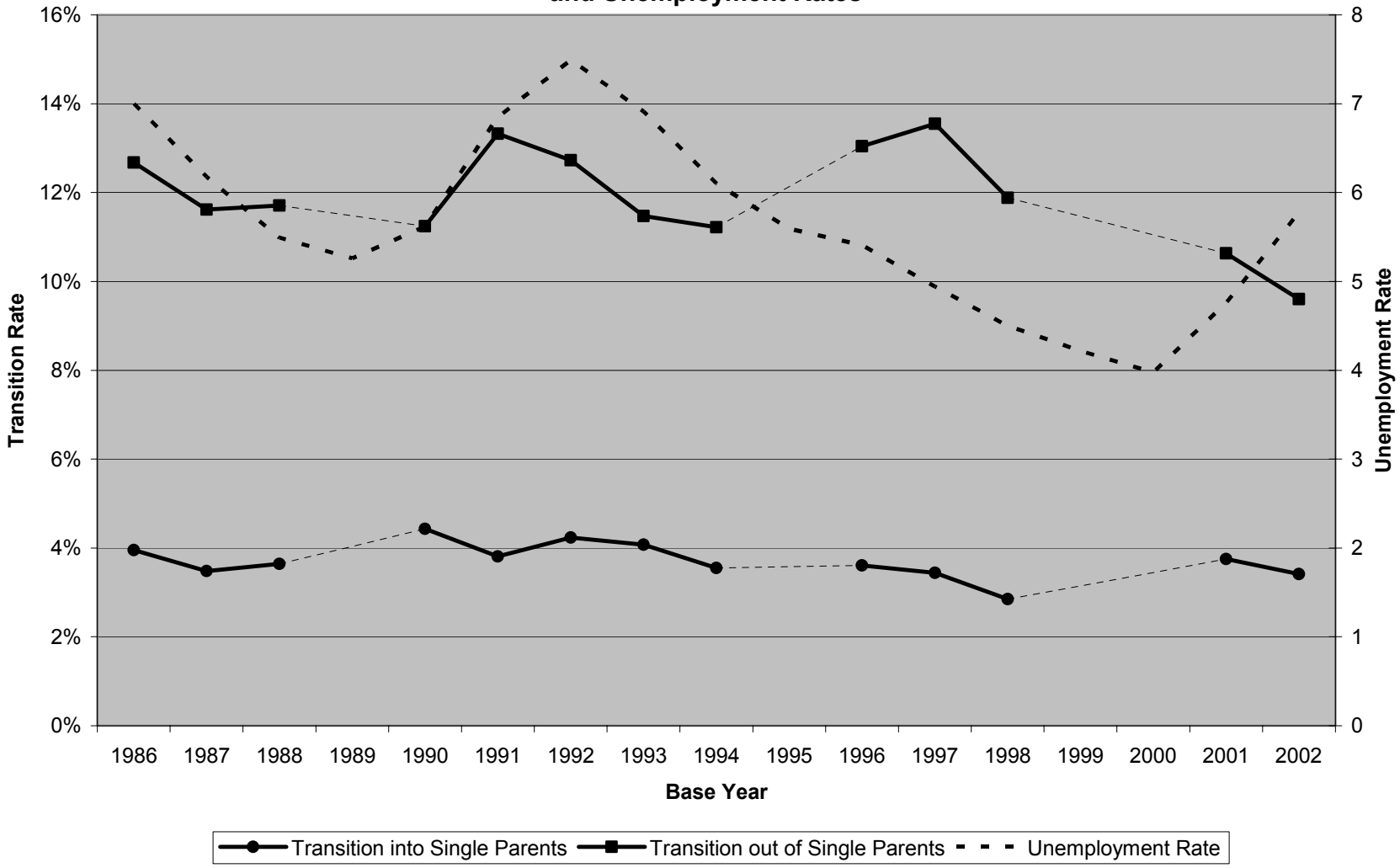

Table 1
Distribution of Children's Living Arrangements by Race/Ethnicity
March Current Population Survey (1989-2004, selected years)

	Married w/No Other Adults	Single w/No Other Adults	Single and Cohabiting	Muti-Generational (Married or Single)	With Others (Married or Single)	No Parents
White						
1989	78.34	11.65	1.91	2.73	3.91	1.46
1996	73.82	12.38	2.66	3.47	4.98	2.68
2004	73.07	12.51	3.65	3.69	4.12	2.96
African-American						
1989	35.11	37.61	2.96	8.65	8.16	7.5
1996	30.71	38.21	3.67	9.7	8.44	9.28
2004	30.97	38.5	5.48	7.63	8.32	9.1
Latino						
1989	58.35	20.65	1.95	5.37	11.15	2.53
1996	52.19	19.51	2.94	6.35	13.7	5.31
2004	55.84	15.22	4.97	6.79	12.68	4.51

Table 2
Living Arrangement Probit Results
March Current Population Survey (1989-2004)

	Dependent Variable					
	Married Parents	Single Parent	One Parent and Cohabitor	Multi-Generational Household	Parent and Others	No Parents
Mean of Dep. Variable	0.6559	0.1717	0.0309	0.0420	0.0644	0.0346
Quadratic Time Trend						
Unemployment rate	-0.0035	0.0038	0.0005	-0.0006	-0.0001	-0.0004
	(0.0012)	(0.0012)	(0.0004)	(0.0006)	(0.0006)	(0.0004)
	-2.84	3.21	1.20	-1.14	-0.14	-0.88
Quadratic Time Trend and Code-Change Dummies (1994 and 1995)						
Unemployment rate	-0.0043	0.0047	-0.0002	-0.0007	0.0000	0.0002
	(0.0015)	(0.0012)	(0.0004)	(0.0006)	(0.0007)	(0.0005)
	-2.82	3.97	-0.54	-1.16	-0.07	0.41
Year Dummies						
Unemployment rate	-0.0035	0.0036	-0.0004	0.0002	-0.0001	-0.0001
	(0.0019)	(0.0015)	(0.0005)	(0.0008)	(0.0009)	(0.0005)
	-1.81	2.39	-0.82	0.28	-0.09	-0.24
Sample Size	547,535	547,535	547,535	547,535	547,535	547,535

Notes: (1) All specifications include dummy variables for sex, age, race, central city status, welfare waiver and TANF implementation, state fixed effects, and the maximum welfare benefit level for a family of three. (2) Marginal effects and robust standard errors are reported.

Table 3
Living Arrangement Probit Results by Race
March Current Population Survey (1989-2004)

	Dependent Variable					
	Married Parents	Single Parent	One Parent and Cohabitor	Multi-Generational Household	Parent and Others	No Parents
White Children						
Mean of Dep. Variable	0.7469	0.1312	0.0290	0.0289	0.0420	0.0217
Unemployment rate	-0.0048	0.0036	-0.0002	0.0005	0.0005	0.0001
	(0.0016)	(0.0013)	(0.0006)	(0.0007)	(0.0007)	(0.0004)
	-3.07	2.81	-0.40	0.72	0.78	0.29
Sample size	361,701	361,701	361,701	361,701	361,701	361,701
African-American Children						
Mean of Dep. Variable	0.3303	0.3880	0.0366	0.0752	0.0800	0.0894
Unemployment rate	-0.0039	0.0071	-0.0003	-0.0027	-0.0022	0.0016
	(0.0035)	(0.0043)	(0.0013)	(0.0016)	(0.0030)	(0.0024)
	-1.12	1.67	-0.23	-1.63	-0.72	0.69
Sample size	68,617	68,617	68,617	68,617	68,617	68,617
Latino Children						
Mean of Dep. Variable	0.5567	0.1802	0.0331	0.0584	0.1307	0.0401
Unemployment rate	-0.0019	0.0082	-0.0002	-0.0033	-0.0036	0.0000
	(0.0019)	(0.0041)	(0.0015)	(0.0017)	(0.0022)	(0.0019)
	-1.02	2.02	-0.13	-1.91	-1.69	0.01
Sample Size	88,916	88,916	88,916	88,916	88,916	88,916

Notes: (1) All specifications include dummy variables for sex, age, central city status, welfare waiver and TANF implementation, the 1994 and 1995 code changes, state fixed effects, the maximum welfare benefit level for a family of three, and a quadratic time trend. (2) Marginal effects and robust standard errors are reported.

Table 4
Living Arrangement Probit Results by Age
March Current Population Survey (1989-2004)

	Dependent Variable					
	Married Parents	Single Parent	One Parent and Cohabitor	Multi-Generational Household	Parent and Others	No Parents
Children Ages 3-6						
Mean of Dep. Variable	0.6563	0.1515	0.0356	0.0567	0.0692	0.0306
Unemployment rate	-0.0045	0.0043	0.0002	0.0000	-0.0004	-0.0002
	(0.0019)	(0.0017)	(0.0007)	(0.0010)	(0.0008)	(0.0007)
	2.34	-2.58	-0.32	-0.04	0.51	0.22
Sample size	167,953	167,953	167,953	167,953	167,953	167,953
Children Ages 7-11						
Mean of Dep. Variable	0.6593	0.1735	0.0316	0.0397	0.0625	0.0334
Unemployment rate	-0.0030	0.0041	-0.0005	-0.0012	-0.0001	0.0003
	(0.0015)	(0.0014)	(0.0007)	(0.0008)	(0.0007)	(0.0006)
	2.00	-2.93	0.65	1.57	0.13	-0.43
Sample size	213,259	213,259	213,259	213,259	213,259	213,259
Children Ages 12-15						
Mean of Dep. Variable	0.6510	0.1898	0.0253	0.0301	0.0621	0.0401
Unemployment rate	-0.0059	0.0058	-0.0004	-0.0008	0.0004	0.0005
	(0.0026)	(0.0023)	(0.0006)	(0.0005)	(0.0010)	(0.0005)
	2.27	-2.49	0.65	1.60	-0.40	-0.92
Sample Size	166,323	166,323	166,323	166,323	166,323	166,323

Notes: (1) All specifications include dummy variables for sex, age, race, central city status, welfare waiver and TANF implementation, the 1994 and 1995 code changes, state fixed effects, the maximum welfare benefit level for a family of three, and a quadratic time trend. (2) Marginal effects and robust standard errors are reported.

Table 5
Living Arrangement Probit Results by Race
March Current Population Survey (1979-2004)

	Dependent Variable		
	Married Parents	Single Parent	Other Arrangement
All Children			
Mean of Dep. Variable	0.6706	0.1632	0.1662
Unemployment rate	-0.0019	0.0009	0.0007
	(0.0006)	(0.0007)	(0.0007)
	-3.00	1.29	0.94
Sample size	882,988	882,988	882,988
White Children			
Mean of Dep. Variable	0.7608	0.1243	0.1150
Unemployment rate	-0.0009	0.0008	0.0001
	(0.0007)	(0.0006)	(0.0007)
	-1.23	1.26	0.08
Sample size	593,162	593,162	593,162
African-American Children			
Mean of Dep. Variable	0.3395	0.3628	0.2977
Unemployment rate	-0.0022	0.0023	0.0002
	(0.0018)	(0.0021)	(0.0016)
	-1.22	1.08	0.10
Sample size	111,192	111,192	111,192
Latino Children			
Mean of Dep. Variable	0.5732	0.1791	0.2477
Unemployment rate	-0.0046	0.0024	0.0021
	(0.0027)	(0.0021)	(0.0033)
	-1.69	1.13	0.62
Sample Size	133,087	133,087	133,087

Notes: (1) All specifications include dummy variables for sex, age, central city status, welfare waiver and TANF implementation, the 1989, 1994 and 1995 code changes, state fixed effects, the maximum welfare benefit level for a family of three, and a quadratic time trend. (2) Marginal effects and robust standard errors are reported.

Table 6
Living Arrangement Transition Matrix
Survey of Income and Program Participation (1986-2002)

	T2 Living Arrangement					
T1 Living Arrangement	Married Parents Alone	Single Parents Alone	Cohabiting Single Parent	Multi-Generation Household	Other Shared Household	N (unweighted)
(row percent shown)						
Married Parents Alone	95.48	2.68	0.08	0.43	1.33	108,085
Single Parents Alone	5.92	88.00	1.89	1.20	2.98	29,738
Cohabiting Single Parent	11.91	15.68	67.88	0.62	3.91	2,981
Multi-Generational Household	7.79	7.35	0.54	80.87	3.44	6,864
Other Shared Household	18.97	10.39	1.44	1.61	67.59	10,164

Table 7
Living Arrangement Probit Results
Comparison of SIPP (1986-2002) and CPS (1989-2004)

	Dependent Variable					
	Married Parents	Single Parent	One Parent and Cohabitor	Multi-Generational Household	Parent and Others	No Parents
CPS 1989-2004						
Mean of Dep. Variable	0.6559	0.1717	0.0309	0.0420	0.0644	0.0346
Quadratic Time Trend and Code-Change Dummies (1994 and 1995)						
Unemployment rate	-0.0043	0.0047	-0.0002	-0.0007	0.0000	0.0002
	(0.0015)	(0.0012)	(0.0004)	(0.0006)	(0.0007)	(0.0005)
	-2.82	3.97	-0.54	-1.16	-0.07	0.41
Sample Size	547,535	547,535	547,535	547,535	547,535	547,535
SIPP 1986-2002						
Mean of Dep. Variable	0.6927	0.1871	0.0180	0.0411	0.0612	
Quadratic Time Trend and Code-Change Dummy (1996)						
Unemployment rate	-0.0009	0.0027	0.0001	-0.0019	0.0003	
	(0.0021)	(0.0015)	(0.0005)	(0.0008)	(0.0013)	
	-0.40	1.82	0.10	-2.47	0.29	
Sample Size	133,779	133,779	133,779	133,779	133,779	

Notes: (1) All specifications include dummy variables for sex, age, race, central city or metropolitan status, welfare waiver and TANF implementation, state fixed effects, and the maximum welfare benefit level for a family of three. (2) Marginal effects and robust standard errors are reported.

Table 8
Living Arrangement Transition Probit Results
Survey of Income and Program Participation (1986-2002)

	Dependent Variable			
	Transition Into Married Parents	Transition Out of Married Parents	Transition Into Single Parent	Transition Out of Single Parent
Mean of Dep. Variable	0.0912	0.0452	0.0378	0.1200
Unemployment rate	0.0006	0.0019	0.0003	0.0077
	0.0025	0.0010	0.0009	0.0031
	0.25	1.99	0.37	2.53
Sample Size	43,355	90,424	108,185	25,594

Notes: (1) All specifications include dummy variables for sex, age, race, metropolitan status, welfare waiver and TANF implementation, state fixed effects, and the maximum welfare benefit level for a family of three. (2) Marginal effects and robust standard errors are reported.

Table 9
Living Arrangement Transition Probit Results
Survey of Income and Program Participation (1986-2002)

	Dependent Variable			
	Transition Into Married Parent	Transition Out of Married Parent	Transition Into Single Parent	Transition Out of Single Parent
White Children				
Mean of Dep. Variable	0.1113	0.0411	0.0334	0.1450
Unemployment rate	0.0000	0.0020	0.0005	0.0068
	(0.0037)	(0.0010)	(0.0010)	(0.0047)
	0.00	1.97	0.48	1.35
Sample Size	23,870	71,797	81,895	13,772
African-American Children				
Mean of Dep. Variable	0.0452	0.0657	0.0698	0.0807
Unemployment rate	0.0039	-0.0047	0.0059	0.0069
	(0.0031)	(0.0043)	(0.0037)	(0.0051)
	1.25	-1.1	-1.62	1.44
Sample Size	12,523	7,336	11,406	8,497
Latino Children				
Mean of Dep. Variable	0.1103	0.0610	0.0419	0.1176
Unemployment rate	-0.0132	0.0050	0.0008	0.0156
	(0.0054)	(0.0055)	(0.0019)	(0.0072)
	-2.42	0.9	0.40	2.18
Sample Size	4,279	6,672	8,692	2,186

Notes: (1) All specifications include dummy variables for sex, age, metropolitan status, welfare waiver and TANF implementation, state fixed effects, and the maximum welfare benefit level for a family of three. (2) Marginal effects and robust standard errors are reported.

Table 10
Living Arrangement Transition Probit Results
Survey of Income and Program Participation (1986-2002)

	Dependent Variable	
	Transition Into Arrangement	Transition Out of Arrangement
Single Parent and Unmarried Cohabitor	0.0053	0.3212
Mean of Dep. Variable	0.0003	-0.0227
Unemployment rate	(0.0003)	(0.0181)
	0.96	-1.26
Sample Size	130,446	2,743
Multi-Generation Family (Married or Single)	0.0066	0.1913
Mean of Dep. Variable	-0.0001	-0.0013
Unemployment rate	(0.0003)	(0.0080)
	-0.38	-0.17
Sample Size	125,286	5,895
Other Shared Arrangement (Married or Single)	0.0180	0.3241
Mean of Dep. Variable	0.0017	-0.0065
Unemployment rate	(0.0005)	(0.0143)
	3.03	-0.46
Sample Size	124,683	9,096

Notes: (1) All specifications include dummy variables for sex, age, race, metropolitan status, welfare waiver and TANF implementation, state fixed effects, and the maximum welfare benefit level for a family of three. (2) Marginal effects and robust standard errors are reported.