How does Unemployment Affect Family Arrangements for Children?

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Abstract

This study uses the Survey of Income and Program Participation to analyze whether and how the event of a job less in families with children changes family arrangements. We distinguish between four types of initial family arrangements: married parents, non-married parents, mothers cohabiting with their partner, and single mothers. Comparing outcomes for children whose parents become unemployed to children whose parents do not, we find a positive association between job loss and the probability of experiencing a change in family arrangements for children who initially live with their married parents or their single mother. Fixed effect models further corroborate this positive relationship for children who initially live with their married parents. Single mothers, however, appear to be less able to change toward more formal family arrangements after their job loss. These results suggests that changes in family structure may function as a channel through which parental job loss affects the well-being of children.

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1 Introduction

The unemployment rate rose from 5 percent to almost 10 percent during the Great Recession. As the number of people without jobs is slowly declining, some of the long-term consequences of this period of high unemployment slowly become visible. One important aspect concerns the impact of job loss on family arrangements and the well-being of children living in these families.

In this study, we address this question using the Survey of Income and Program Participation (SIPP). We distinguish between four initial forms of family arrangements. Focusing on families with children age zero to nine at the beginning of the survey, we then analyze how job loss and subsequent unemployment of a parent relates to changes in family structures. We first compare changes in family arrangements between children who witness an unemployment event and children who do not experience such an event. Our results show that children who initially live with their married parents or their single mother and who experience an unemployment are also more likely to witness a change in family arrangements.

We then exploit the panel structure of the SIPP to estimate fixed effect models. These models further corroborate that job loss leads to more changes in family arrangements for children who initially live with their married parents. For single mothers, the positive association disappears, and they are less able to change toward more formal family arrangements after their job loss.

Our paper is related to the literature that links family structure to children's well-being. Early studies in that area focus on marital dissolution and highlight the challenges for childrearing when parents divorce (Seltzer, 1994; Amato, 2000). As non-marital family arrangements have become more widespread, researchers have looked more carefully at different forms of cohabitation. Brown (2004) studies the role of different family structure for children's well-being and finds that children in non-marital family arrangements generally have lower levels of well-being, but the type of non-marital family arrangement (e.g., two-biological-parent cohabiting families or single mothers) does not significantly influence children's well-being. Artis (2007) points out that lower economic resources and lower well-

being of mothers among non-married family arrangements explains most of this difference.

Others have looked at the consequences of unemployment on children's well-being. Kalil and Ziol-Guest (2005) showed that adolescents' self-esteem is negatively affected if their single mother loses her job. Similarly, Stevens and Schaller (2011) find that parental job loss significantly increases the risk that their children have to repeat a grade.

One possible channel linking parental job loss to the well-being of children is changes in family structure. Loss of income can create family stress, which in turn can destabilize family arrangements. However, difficult economic circumstances can also increase the need to pool resources, for instance by "doubling-up" (i.e., by moving in with a partner or other, non-related person), or by getting married. Only a few studies have addressed these potential links, and most of them tend to focus on adults or married parents. White and Rogers (2000) review existing literature and conclude that for married couples, the event of a job loss significantly increases the risk of divorce. More recently, Wiemers (2011) find that adults are more likely to move in with other people after losing their job. Only London and Fairlie (2008) focus on family arrangements for children. They find a positive association between the unemployment rate and the probability that children live with a single parent and not with their married parents and a positive association between the unemployment rate and transitions from single motherhood toward cohabitation. However, it is unclear from their analysis whether the event of a job loss triggers these changes, or whether economy-wide circumstances also affect families where no one loses their job.

Our studies expands on this research by looking at unemployment events within a family and by analyzing the effect of unemployment on change in family arrangements for several initial types of family arrangements. Thereby, we can much more precisely isolate the potential effect of job loss and investigate heterogeneity of this effect with respect to initial family conditions. Similar to London and Fairlie, our findings suggests that the event of a job loss increases the risk of divorce for married parents. We also find evidence that single mothers struggle to change toward more formal family arrangements after losing their job. These findings suggests that changes in family arrangements are a potential channel through which parental job loss affects the well-being of children, at least for some initial family

arrangements.

The remainder of the paper is structured as follows. The next section describes the sample for our analysis and defines the various family arrangements. Section 3 presents the findings of our analysis, which are further discussed in the conclusion.

2 Sample and family arrangements

The primary data source for this study is the SIPP, a nationally representative sample of the civilian, non-institutionalized population 15 years of age and older. People are interviewed once every four months. Each interview period is called a wave. When interviewed, respondents are asked to provide information about the preceding four months. We use SIPP panels 1996, 2001, 2004, and 2008. SIPP 1996 and 2004 include 12 waves, while SIPP 2001 includes eight waves. SIPP 2008 will have 12 waves but only the first 10 waves are currently available. These panels cover between three and four years.

We focus on children who are between one and nine years old at the first interview month. We then distinguish between two groups of children: those affected by an unemployment event and those not effected by an unemployment event. An unemployment event occurs for a month t if one of the parents of the child works during that month but does not work and reports being on layoff or looking for a job the following month. This definition excludes cases where a parent drops out of the labor force for non-work related reasons such as taking care of a family member or getting married. It does include cases where an adult moves away during the first month of unemployment.

For children with at least one unemployment event, we select the three months before and the nine months after the first observed first job loss, for a total of 13 months. The group with no unemployment event consists of children with at least one employed parent who does not become unemployed. We exclude children in families where no parent is employed as well as children in families where a parent stops working but does not look for a job. This definition of the comparison group comes the closest to the underlying hypothetical experiment that randomly assigns an unemployment event to a parent in households with children. For each

child in the comparison group, we randomly select a 13-month time period such that the distribution of observed months in both groups is the same.

For some children, we do not observe all 13 months. For instance, it is possible that a SIPP panel ends before the last of the 13 months (so-called right-censoring). Similarly, the SIPP panel might start after the first of the 13 months (left-censoring). A third possibility concerns missing observations if an individual refuses to be interviewed, cannot be found, or moves to a location without being followed. While the SIPP follows individuals 15 years or older if they move, children under 15 years are only followed if they move with an adult who is an original sample member. We exclude children with right-censored or left-censored time period, but keep children with missing observations. Because of the random selection of time period for children with no unemployment event, disregarding censored cases does not affect one group disproportionately.

We create categories of family arrangements in two steps. First, we establish the relationship of each family member to a child and distinguish the following categories:

- Mother (married or not married),
- Father (married or not married),
- Unmarried partner of father or mother,
- Grandparents, aunt or uncle, or other relative,
- Unrelated household member,
- Sibling.

Based on these categories, we then construct the following five family arrangements:

- Married parents: the child lives with married parents.
- Two-bio cohab: the child lives with unmarried biological parents
- Cohab mom: the child lives with mother and her partner.

- Single mom: the child lives with his or her mother who does not have or does not cohabit with a partner.
- Dad / no parent: the child lives with either the father or no parent.

In the SIPP, the mother or father of a child can be the biological parent, stepparent, or parent through adoption. For children living with their married parents, we do not distinguish between biological parents or on-biological parents, so stepparents are included in this group.

For our analysis, we focus on initial family arrangements where the mother is present, i.e., the first four groups. However, we include the last group as a possible family arrangement in later time periods.

Similar to the definition of an unemployment event, a change in family arrangements in month t occurs if the child lives in a different family arrangement in month $t + 1$ as compared to month t. Besides identifying changes in family arrangements, we also classify them into changes toward more or less formal family arrangements. The most formal family arrangement is marriage, followed by two-bio cohabiting parents, a mother cohabiting with her partner, single mother, and finally family arrangements without a mother.

When inspecting the data, we realize that changes in family arrangements do not occur during the first wave. This appears to be a problem with the survey design, so we disregard the first wave for our analysis. For children with missing observations (e.g., because the child moved away), we cannot observe the actual change in family arrangements, but we can at least examine whether they occur more frequently for some initial family arrangements of for children with an unemployment event. We therefore treat their family arrangement as unobserved.

We use our sample in two different ways. First, we compare family arrangements at the first month ("prior") to those at the last month ("post"). Such an analysis has the advantage of providing snap shots of family arrangements within the time window of one year. However, comparing only two months does not allow us to examine when these changes happen in relationship to a job loss. Therefore, we also look at month-to-month changes in family arrangements. The latter approach has the further advantage that we can compare changes

in family arrangements over time between the two groups of children (i.e., those with and those without an unemployment event).

3 Empirical Analysis

In this section, we first describe central characteristics of children in our sample and transitions from one family arrangement to another. We then discuss whether we can infer from these patterns how unemployment shocks influence changes in family arrangements.

3.1 Descriptive results

Table 1 displays sample characteristics using the first observed month. About 30 percent of all children experience an unemployment event during the three to four years they were interviewed. While the number appears to be large, it is consistent with an unemployment risk of about 1 to 1.5 percent per month (as observed in the SIPP). Children in both groups have about the same average age and gender ratio, but children in families with an unemployment event are more likely to be Hispanic or black (just as their parents). They are also less likely to initially reside in a household with married parents and more likely to live in other, less formal family arrangements. Earnings and income in these households before job loss is slightly lower. Parents of these children tend to be more likely to just have a high school degree and less likely to have attended college.

The next two tables show how family arrangements change between the prior and post period for the two groups of children. Rows indicate prior family arrangements and columns indicate post family arrangements. There is one more column for these tables called "Not observed". These are cases where the prior family arrangement is observed, but not the post family arrangement. As discussed in the previous section, this category does not include censored cases but only cases for which the post month falls within the SIPP survey time window and is not observed for some other reason.

Table 2 displays the transition matrix for children in households with no observed unem-

ployment event. About 87 percent of children living with married parents and 80 percent of children living with their single mother are in the same family arrangement 13 months later. Stability in family arrangements is less frequent for children living with their non-married parents or their cohabiting mother, namely only 68 and 55 percent, respectively.

If a change in living arrangements occurs for children initially living with their married parents, then they are most likely to live with their single mother 13 months later. For children initially living with their non-married parents or cohabiting mother, the two most likely changes are toward married parents or single mothers. If single mothers change their family arrangement, then they are the most likely to get married.

Comparing these results with children who experience an unemployment event (table 3), one can see that they tend to have more frequent changes in family arrangements. However, the comparison is complicated by the non-observed post family arrangements. To compare better the frequency of changes between the two groups we focus from for the remainder of the analysis on children those post family arrangement can be observed. Table 4 re-organizes the transition matrices using the definition of more formal and less formal changes in family arrangements. The table makes clear that if the post family arrangement is observed, then children with an unemployment event tend to be more likely to experience any kind of change in their family arrangement (see first column). The next two columns highlight that children living with their non-married parents or their cohabiting mother tend to experience less changes toward more formal family arrangements and more changes toward less formal family arrangements. For children living with their single mother, an unemployment event is correlated with a higher rate of changes toward both more and less formal family arrangements.

Figures 1 and 2 illustrate the dynamics of changes in family arrangements for children who initially live with their married parents and single mothers, respectively. the figures show the number of changes for each month, centered around the month of job loss. We see two different patterns. For the first figure, there is a clear spike at the month of job loss for children who experience an unemployment event. In subsequent months, the risk is also elevated relative to the comparison group. For the second figure, the risk of any change is

generally higher for children with an unemployment event, but it does not increase at the time and after the job loss occurs; to the contrary, it seems to slightly decrease.

While these descriptive results show that children who experience an unemployment event are generally more likely to also experience a change in their family arrangement, it is not clear whether this difference is due to other observed or unobserved factors, and whether it can be directly attributed to the unemployment event. The following section addresses this question.

3.2 Regression results

We first examine whether the positive association between children in families with an unemployment event and risk of a changes in family arrangements is due to other factors associated with the unemployment event. To that end, we specify logistic regressions where the dependent variable measures any change between the pre and post time period, and the independent variables include a dummy for a child experiencing an unemployment event as well as other covariates. Covariates include: sex of the child, age of the child, educational level of the adult (a dummy for high-school degree and a dummy for some college; the reference category is no high-school degree), race and ethnicity of the adult (a dummy for being Hispanic, black, or another race or ethnicity; the reference category is being white), age of the adult, number of children in household, number of adults in household, and total household income (expressed in January 2000 values and 1,000 dollars). The adult of a child is the mother if present in the family, or, if not, the father; if both parents are absent, then the adult of the child is the reference person in the household. Finally, we also include year fixed-effects into the regression. We specify this regression separately for each beginning family arrangement in order to detect heterogeneity in the association between unemployment event and changes in family arrangements by beginning family category.

Since these are nonlinear models, we compute average marginal effects. The average marginal effect of a dummy variable is obtained by computing the risk of a family change for each child separately for each value of the variable. Other characteristics of the child remain the same for both cases. The difference in probabilities is the marginal effect for

each child, and the average of these differences is the average marginal effect. Standard errors are clustered at the household level.

Table 5 presents regression results. For each initial family arrangement, we first report the average marginal effect excluding individual controls (but including year fixed effects) and then including all individual controls. All marginal effects are expressed as percentage values. The unemployment coefficient it positive and statistically significant for two initial family arrangements, married parents and single mothers. For children with married parents and not controlling for observable differences, experiencing an unemployment event is associated with an almost two percent higher risk of also experiencing a change in family arrangement. The effect drops to 1.65 percent when other controls are included, but it remains significant. For children initially living with their single mother, the effect is even larger, four percent and 4.35 percent for the specification with no controls and with controls, respectively. The effects for the other family arrangements are positive but not statistically significant.

Next, we use the classification of types of family arrangements to distinguish between changes toward more formal arrangements versus changes toward less formal arrangements. We use multinomial models because there are now two possible outcomes. As in the first specification, we estimate the model separately for the different initial family arrangements. Because marriage is the most formal family arrangement, we omit results for children who initially live with their married parents; for these children, the multinominal model collapses to the logit model.

As shown in table 6, the effect of unemployment on changes toward less formal family arrangements is larger than toward less formal family arrangements for children who initially live with their non-married biological parents or cohabiting mother. For single mother, the opposite is the case, as expected from table 4. For this group, both effects are also statistically significant.

While these models can account for observable differences between children living in a family that experiences an unemployment event versus children living in a family with no such event, it is still possible that other, unobserved factors contribute to observed out-

come differences. To address this issue, we exploit the panel structure of our sample to estimate fixed effect models. Specifically, we regress a monthly variable measuring a change in family arrangement on a dummy whether the unemployment event has occurred as well time-varying covariates. We also include year fixed effects and fixed effects for each month of the panel. These models compare the probability of a change in family arrangements before versus after the unemployment event after netting out individual fixed effects. We attempted to estimate logistic fixed effects, but they often did not converge; therefore, we resort to estimating linear fixed effect models. As before, results show percentage values of marginal effects. Coefficients are expected to be much smaller as in previous tables because the outcome is now measured on a monthly basis instead of the full 13 months.

Table 8 presents the results for any kind of change in family arrangements. The positive effect of unemployment on changes in family arrangements for children who initially live with their married parents remains positive and highly significant. However, the positive effect for children who initially live with their single mothers from table 5 has disappeared and is even negative. These results are consistent with figures 1 and 2. For children initially living with their mother, we see a clear increase in changes to family arrangements at the time and after the job loss occurs. For children initially living with their single mother, we do not observe a corresponding change.

Table 7 extends the fixed effect model to the two different outcomes. As before, results for children who initially live with their single mother are redundant and therefore omitted. Interestingly, the unemployment coefficient for more formal changes of children initially living with their single mother is negative and significant. This result is in contrast to the large and positive association of unemployment on more formal living arrangements as found in table 6. Apparently, single mothers are less able to change their family arrangement toward living with or even marrying their partner after job loss.

4 Conclusion

This paper examines whether parental job loss affects family arrangements for families with children. Using several categories to classify family structure, we find a positive association between parental job loss and changes in family structure for children who initially live with their married parents or their single mother. When using fixed effect models, the effect for married parents persists in the months after job loss. For single mothers, there is no apparent increase in the overall probability of a change in family arrangements after job loss, but they are less likely to change toward more formal family arrangements after job loss.

These results suggests that difficult economic conditions primarily create instability in families or prevent parents to create more stable family structures. These effects of job loss can in turn negatively influence the well-being of children. Therefore, they provide a potential link between parental job loss and well-being of children consistent with studies that directly look at the effects of job loss on children's outcomes (e.g., Stevens and Schaller, 2011).

Our results show that changes to family arrangements may play an important role in understanding the channels through which economic conditions affect children's well-being. Future work in this area could address the role of non-relatives living in such families (as it is the focus of the doubling-up literature), and address the full relationship between economic conditions, family structure, and outcomes for children.

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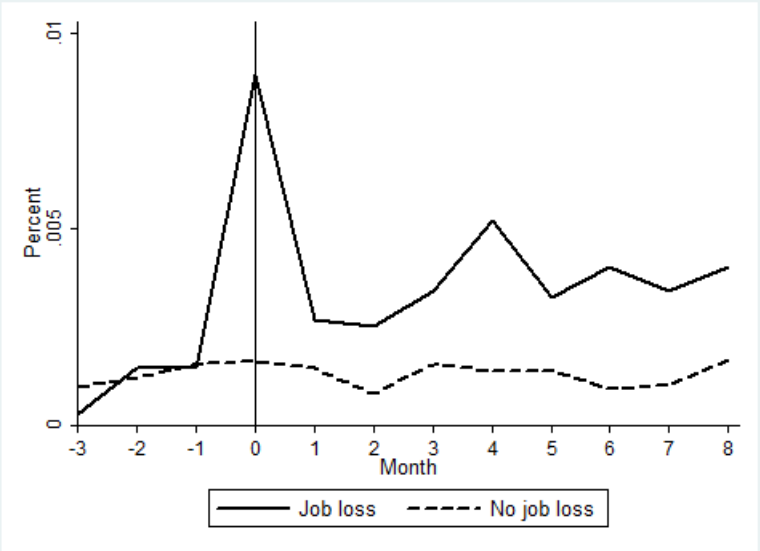
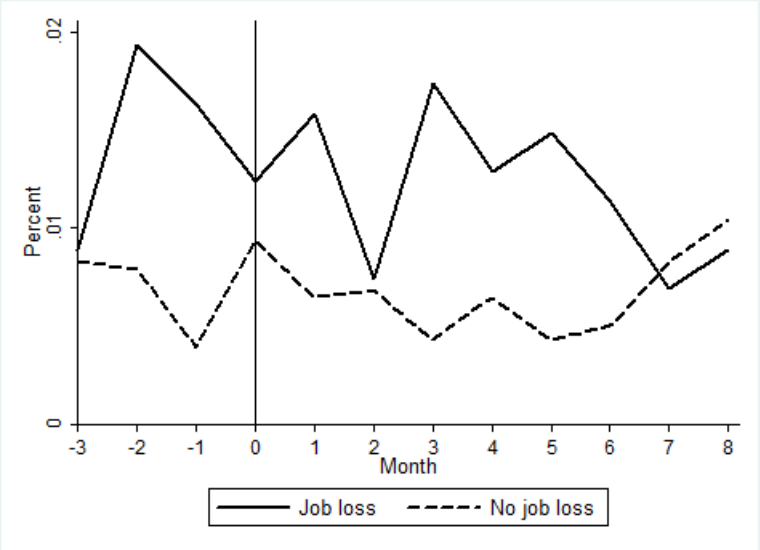
Figure 1: Changes in family arrangements for married parents



Note: Includes all children who initially live with their married parents. Months are relative to the month of job loss for children with an unemployment event and the fourth month for children with no unemployment event.

Figure 2: Changes in family arrangements for single mothers



Note: Includes all children who initially live with their single mother. Months are relative to the month of job loss for children with an unemployment event and he fourth month for children with no unemployment event.

Table 1: Sample characteristics

	No unemployment	Unemployment
Characteristics of children		
Percentage of all children	69.59	30.41
Age	6.16	6.10
Male	51.15	50.64
White, not hispanic	73.30	63.17
Hispanic	9.36	13.46
Black	10.90	16.92
Other race/ethnicity	6.44	6.45
Married parents	83.44	71.94
Two-bio cohab	2.17	5.15
Cohab mom	0.73	1.06
Single mom	13.66	21.84
Dad / no parent	0.00	0.00
Characteristics of households		
Total earnings	6628.25	4660.73
Total income	6914.56	4980.84
Number of people	4.53	4.64
Characteristics of adults		
Age	35.00	33.18
High-school degree	25.12	31.71
Some college	66.03	51.56
White, not hispanic	74.87	65.19
Hispanic	8.72	12.63
Black	10.49	16.27
Other race/ethnicity	5.91	5.91
Number of observations	23,480	10,561

Note: The first observed month of the analysis is used for the summary statistics. Children are individuals who are younger than 10 years old at the beginning of the first wave of a SIPP panel. Adults are corresponding adults (see text for details). All calculations use weights (person weights for individuals and household weights for households). All monetary values are expressed in January 2010 values.

Table 2: Transition matrix for children in households with no observed employment change

		Married parents	Two-bio cohab	Cohab mom	Single mom	Dad / no parent	Not observed	Observations
Married parents	Row %	87.29	0.02	0.01	0.96	0.24	11.49	
	Cell %	72.83	0.01	0.01	0.80	0.20	9.59	
	N	(16,924)	(4)	(2)	(178)	(49)	(2,332)	(19,489)
Two-bio cohab	Row %	7.97	67.99	0.00	2.74	1.03	20.25	
	Cell %	0.17	1.47	0.00	0.06	0.02	0.44	
	N	(41)	(355)	(0)	(12)	(5)	(114)	(527)
Cohab mom	Row %	14.49	0.62	54.54	11.47	0.00	18.90	
	Cell %	0.11	0.00	0.40	0.08	0.00	0.14	
	N	(31)	(1)	(106)	(25)	(0)	(36)	(199)
Single mom	Row %	3.91	0.33	1.35	79.16	0.47	14.78	
	Cell %	0.53	0.04	0.18	10.81	0.06	2.02	
	N	(123)	(10)	(46)	(2,583)	(13)	(490)	(3,265)
Observations		(17,119)	(370)	(154)	(2,798)	(67)	(2,972)	

Note: All calculations use person weights. Row percentages show the percentage of children in the respective column and row as a fraction of all children who are in the row group. Cell percentages show the percentage of children in the respective column and row as a fraction of all children observed in the first period. Number of cases refers to the unweighted number of children in the respective column and row.

Table 3: Transition matrix for children in households with an observed employment change

		Married parents	Two-bio cohab	Cohab mom	Single mom	Dad / no parent	Not observed	Observations
Married parents	Row %	86.74	0.12	0.01	1.95	0.72	10.46	
	Cell %	62.40	0.08	0.01	1.40	0.52	7.53	
	N	(6,489)	(8)	(1)	(156)	(56)	(801)	(7,511)
Two-bio cohab	Row %	7.29	72.59	0.63	5.19	0.88	13.41	
	Cell %	0.38	3.74	0.03	0.27	0.05	0.69	
	N	(45)	(386)	(4)	(30)	(5)	(75)	(545)
Cohab mom	Row %	12.82	0.28	56.13	16.31	0.32	14.14	
	Cell %	0.14	0.00	0.59	0.17	0.00	0.15	
	N	(15)	(1)	(76)	(28)	(1)	(13)	(134)
Single mom	Row %	4.94	0.97	1.94	75.82	1.23	15.09	
	Cell %	1.08	0.21	0.42	16.56	0.27	3.30	
	N	(117)	(22)	(49)	(1,799)	(32)	(352)	(2,371)
Observations		(6,666)	(417)	(130)	(2,013)	(94)	(1,241)	

Note: All calculations use person weights. Row percentages show the percentage of children in the respective column and row as a fraction of all children who are in the row group. Cell percentages show the percentage of children in the respective column and row as a fraction of all children observed in the first period. Number of cases refers to the unweighted number of children in the respective column and row.

Table 4: Changes in family arrangements, by initial family arrangement

	Any change	More formal	Less formal
Children with no unemployment event			
Married parents	1.38	0.00	1.38
Two-bio cohab	14.74	10.00	4.74
Cohab mom	32.76	18.62	14.14
Single mom	7.11	6.56	0.55
Children with unemployment event			
Married parents	3.13	0.00	3.13
Two-bio cohab	16.16	8.42	7.74
Cohab mom	34.63	15.26	19.37
Single mom	10.70	9.25	1.45
Difference in riks (unemployment versus not unemployment)			
Married parents	1.74	—	1.74
Two-bio cohab	1.43	-1.58	3.00
Cohab mom	1.87	-3.36	5.23
Single mom	3.59	2.69	0.90

Notes: All percentages use person weights.

Table 5: Regression: binary logit for any change in family arrangements

	Married parents		Two-bio cohab		Cohab mom		Single mom	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Unemployment and prior	1.94 ***	1.65 ***	2.95	5.20	3.24	3.81	3.99 ***	4.35 ***
	(0.33)	(0.31)	(2.76)	(2.72)	(7.10)	(6.94)	(1.08)	(1.09)
Child: male		0.16		-3.61		13.19 *		1.21
		(0.17)		(2.44)		(5.45)		(0.79)
Child: age		0.08 *		-0.52		-0.83		0.18
		(0.03)		(0.59)		(0.98)		(0.15)
Adult: high-school degree		0.64		-1.90		-5.30		1.01
		(0.47)		(3.66)		(11.49)		(1.90)
Adult: some college		0.07		1.70		-6.94		1.97
		(0.41)		(3.86)		(11.47)		(1.79)
Adult: hispanic		0.06		-9.36 *		-24.27 *		0.46
		(0.42)		(3.39)		(8.01)		(1.86)
Adult: black		1.73 *		4.62		-4.84		-7.22 *
		(0.67)		(4.37)		(7.98)		(1.00)
Adult: other race/ethnicity		-0.21		2.40		-23.82 *		-0.87
		(0.47)		(5.17)		(9.83)		(2.10)
Adult: age		-0.12 *		-0.55 *		-1.83 *		-0.36 *
		(0.02)		(0.23)		(0.60)		(0.08)
Household: number of children		-0.23		-3.38 *		-4.84		-0.53
		(0.15)		(1.46)		(3.17)		(0.57)
Household: number of adults		0.38 **		2.57		-3.96		-1.23
		(0.12)		(1.81)		(10.75)		(0.66)
Household: income		0.04 *		1.74 ***		1.19		0.13
		(0.02)		(0.49)		(0.93)		(0.17)
Observations	23,782	23,782	882	882	283	283	4,794	4,794

Note: All standard errors are clustered at the household level. Standard errors are in paranthesis. Regressions include year-fixed effects. Household income is expressed in January 2000 values and 1000 dollars.
* p<0.5, ** p<0.1, *** p<0.01

Table 6: Regression: multinomial logit for more formal and less formal changes in family arrangements

	Two-bio cohab		Cohab mom		Single mom	
	More formal	Less formal	More formal	Less formal	More formal	Less formal
Unemployment and prior	1.85	5.55 *	-1.41	11.04	3.34 ***	1.45 **
	(2.50)	(2.25)	(6.78)	(6.51)	(1.00)	(0.54)
Child: male	-2.62	-1.88	9.09	10.69 *	0.64	0.78 *
	(2.09)	(1.98)	(4.78)	(5.10)	(0.77)	(0.36)
Child: age	-0.42	-0.30	-1.29	-0.30	0.17	0.02
	(0.53)	(0.45)	(0.89)	(0.95)	(0.14)	(0.06)
Adult: high-school degree	-2.71	-0.00	7.85	-12.62	2.01	-0.90
	(3.41)	(2.76)	(16.64)	(10.30)	(1.79)	(0.72)
Adult: some college	1.11	0.56	7.16	-13.22	2.71	-0.43
	(3.28)	(2.91)	(15.69)	(10.03)	(1.73)	(0.71)
Adult: hispanic	-9.11 *	-4.59	-20.33	-24.29	0.31	0.57
	(4.43)	(4.28)	(13.10)	(14.20)	(1.81)	(0.59)
Adult: black	2.59	3.31	-25.71 *	5.30	-8.98 *	0.26
	(3.43)	(2.90)	(11.98)	(7.45)	(1.42)	(0.57)
Adult: other race/ethnicity	-2.20	5.39	-29.90	-16.34	-2.39	1.29
	(4.41)	(3.39)	(15.82)	(17.30)	(2.42)	(0.69)
Adult: age	-0.32	-0.41 *	-1.32 *	-1.22 *	-0.35 *	-0.03
	(0.20)	(0.18)	(0.54)	(0.59)	(0.08)	(0.03)
Household: number of children	-1.33	-3.14 *	-2.51	-5.42	-0.48	-0.06
	(1.22)	(1.16)	(3.13)	(3.35)	(0.57)	(0.15)
Household: number of adults	1.30	1.49	-12.41	4.11	-2.35 *	0.52 **
	(1.75)	(1.15)	(8.85)	(9.56)	(0.70)	(0.19)
Household: income	1.35 **	1.01 *	0.81	0.81	0.07	0.06
	(0.45)	(0.44)	(0.79)	(0.82)	(0.17)	(0.06)
Observations	826	730	230	231	4,749	3,768

Note: All standard errors are clustered at the household level. Standard errors are in paranthesis. Regressions include year-fixed effects. Household income is expressed in January 2000 values and 1000 dollars.
* p<0.5, ** p<0.1, *** p<0.01

Table 7: Regression: Fixed-effect for any change in family arrangements

	(1)	(2)	(3)	(4)
Unemployment event occurred	0.32 ***	-0.45	-3.38	-0.21
	(0.04)	(0.53)	(1.73)	(0.19)
Child: age	-0.16 *	-0.38	1.00	-0.07
	(0.06)	(0.39)	(1.02)	(0.11)
Adult: age	-0.33 *	-0.52 *	-0.84 *	-0.39 *
	(0.04)	(0.20)	(0.21)	(0.06)
Household: number of children	0.54	2.04	-0.35	2.45 **
	(0.63)	(1.30)	(2.78)	(0.74)
Household: number of adults	1.64 ***	1.49	7.56 ***	-2.63 *
	(0.13)	(1.06)	(1.79)	(0.29)
Household: income	0.01 ***	0.03	0.41	-0.08 *
	(0.00)	(0.14)	(0.21)	(0.03)
Observations	23,867	883	284	4,794

Note: All standard errors are clustered at the individual child level. Standard errors are in paranthesis. Regressions include year and observed month fixed effects. Household income is expressed in January 2000 values and 1000 dollars.
* p<0.5, ** p<0.1, *** p<0.01

Table 8: Regression: Fixed-effect for more / less formal change in family arrangements

	Two-bio cohab		Cohab mom		Single mom	
	More formal	Less formal	More formal	Less formal	More formal	Less formal
Unemployment event occurred	-0.25	-0.24	-0.83	-1.72	-0.35 *	0.11
	(0.39)	(0.35)	(1.31)	(1.28)	(0.18)	(0.08)
Child: age	-0.35	-0.33	1.41	-0.28	0.03	-0.05
	(0.29)	(0.27)	(0.80)	(0.89)	(0.10)	(0.05)
Adult: age	-0.16	-0.51 *	0.24	-1.38 *	-0.01	-0.47 *
	(0.28)	(0.24)	(0.76)	(0.23)	(0.16)	(0.06)
Household: number of children	0.77	1.10	-1.15	-1.04	2.32 **	0.54
	(0.98)	(1.14)	(1.39)	(2.52)	(0.71)	(0.49)
Household: number of adults	-0.12	3.58 ***	1.43	9.43 ***	-3.32 *	0.43 **
	(1.01)	(1.05)	(2.45)	(1.86)	(0.28)	(0.16)
Household: income	-0.00	0.10	0.02	0.48 *	-0.10 *	-0.01
	(0.10)	(0.08)	(0.16)	(0.19)	(0.03)	(0.02)
Observations	809	789	222	229	4,680	4,391

Note: All standard errors are clustered at the individual child level. Standard errors are in paranthesis. Regressions include year and observed month fixed effects. Household income is expressed in January 2000 values and 1000 dollars.
* p<0.5, ** p<0.1, *** p<0.01