Living Far Apart Together

Dual-Career Location Constraints and Marital Non-Cohabitation

Marta Murray-Close*

April 2, 2013

For dual-career couples, decisions about where to live can put work and family life in conflict. Highly educated, specialized workers are likely to find that the quality of their employment opportunities varies widely across locations; consequently, they may also find that career-motivated migration is an important means of advancement. When these workers form families with similarly educated, specialized partners, they may face difficult trade-offs between their ability to build a shared life with their partner in a single location and their ability to pursue employment opportunities where the most desirable opportunities arise. The manner in which dual-career couples respond to these trade-offs has important implications for their personal and professional lives. Couples who live together may compromise their careers; those who live apart may compromise their relationships.

Most research on the dual-career location problem has assessed the implications of joint migration decisions for couples who live together. Research on couples who end their relationships or who live apart in pursuit of career opportunities is less common. A small literature has examined the motivations of non-cohabitators and has assessed the consequences of living apart for their personal and professional lives (Gerstel and Gross, 1982; Rhodes, 2002; Guler, Guvenen and Violante, 2009). But because the studies in this literature have relied on non-probability samples or have not included empirical tests of their theoretical models, they have not provided information

*mmurrayclose@gmail.com. This paper was prepared for the 2013 meeting of the Population Association of America. The research was conducted while the author was a member of the economics faculty at the University of Massachusetts Amherst.

about the prevalence or predictors of non-cohabitation in the larger population of dual-career couples. The only study to date that has examined non-cohabitators using a nationally representative dataset speculated about, but did not empirically assess, the role of dual-career location constraints in the decision to live apart (Rindfuss and Stephen, 1990).

This paper uses data from the 2000 United States census to estimate the prevalence of non-cohabitation among married, college-educated workers and to examine the association between non-cohabitation and three proxies for career-related location constraints. Specifically, I assess the extent to which education beyond college, the geographic mobility of workers in a person's occupation, and the geographic clustering of workers in the occupation influence the probability that a person lives apart from his or her spouse. The rationale for these proxies is the following: First, education beyond college entails the accumulation of specialized human capital, and workers with specialized human capital may stand to gain more than other workers from career-motivated migration. Second, working in an occupation that requires frequent moves or one in which jobs are clustered in a small number of geographic areas constrains the location choices of workers and may increase the probability that they face location-related conflicts between their careers and their relationships.

I find that non-cohabitation is unusual but not unknown among highly educated workers; the prevalence of non-cohabitation among all college-educated workers was 1.9 percent, and the prevalence was as high as 2.8 percent for women and 4.2 percent for men under 30. Consistent with the idea that some couples live apart to solve the dual-career location problem, I also find that non-cohabitation is more common among workers with higher levels of education and workers in occupations with high degrees of geographic clustering. Contrary to my expectations, however, I find that non-cohabitation is less prevalent among workers in occupations with high rates of geographic mobility.

1 Previous research on the location choices of couples

Over three decades ago, in the wake of a dramatic rise in women's labor force participation, economists concerned with migration observed that location choices presented special difficulties for dual-earner couples. Whereas single workers and workers in single-earner couples were free to move to

the location that maximized their individual employment prospects, workers in dual-earner couples were constrained by the possibility that a choice to live where their own prospects were best might harm the prospects of their spouse. At the time when these early observers were writing, existing research on migration was limited to studies of individual actors: men and women unencumbered by family ties and men whose wives suffered no great loss in following them. To understand the impact of dual-earner concerns on the migration behavior of contemporary families, the economists developed new models of family migration, incorporating the work-related benefits and costs of location choices for wives on an equal footing with the benefits and costs for husbands (Sandell, 1977; Mincer, 1978).

These initial descriptions of the dual-earner location problem assumed that it only two solutions: couples could live together in the location that maximized their combined employment opportunities, or they could break up and move separately to the locations that maximized their individual opportunities. Most subsequent research has adopted the same assumption. (Lichter, 1980; Spitze, 1984; Shihadeh, 1991; Bielby and Bielby, 1992; Shauman and Xie, 1996; Bailey and Cooke, 1998; Costa and Kahn, 2000; Jacobsen and Levin, 2000; Boyle et al., 2001; Cooke, 2001; Boyle et al., 2003; Cooke, 2003; Lundberg and Pollak, 2003; Jorges, 2006; Rabe, 2006; Compton and Pollak, 2007; Shauman and Noonan, 2007; Gemici, 2008; Lee and Li, 2008; McKinnish, 2008; Cooke et al., 2009; Shauman, 2010).

At the same time, a small qualitative literature has found that some professional couples solve the dual-earner location problem – for them, a dual-*career* location problem – in a third way: they live apart (Gerstel and Gross, 1982; Rhodes, 2002). This literature has provided rich information about the reasons highly educated couples live apart and their experiences with the arrangement. More recently, a theoretical study incorporated non-cohabitation as a possible outcome in an economic model of joint job search (Guler, Guvenen and Violante, 2009). But because previous studies of non-cohabitation have relied on non-probability samples or have not provided empirical tests of their theoretical models, they have not provided information about the prevalence or predictors of non-cohabitation in the larger population of dual-career couples.

The existing study that is most similar to the current study uses census data from 1960, 1970, and 1980 to estimate the prevalence of non-cohabitation in the population of all married people, including married people without college degrees. Rindfuss and Stephen (1990) report that non-

cohabitation is more common among younger people than older people and among black men and women than white men and women of the same age. The researchers also report that non-cohabitation is more common among men than women, a point to which I will return. Overall, Rindfuss and Stephen find that the percentage of black men who were living apart from their spouse at the time of the census ranged from 4 to 20, depending on the age of the men and the year in which they were enumerated. The percentage of black women who were living apart ranged from 4 to 12, and the percentages of white men and women who were living apart ranged from 1 to 7.

With respect to the reasons that couples live apart Rindfuss and Stephen observe a strong association between marital non-cohabitation and the military employment or incarceration of men. Among men between the ages of 18 and 24 who were not living with their spouse at the time of the census, the percentage living in group quarters ranged from 24 and 57, depending on the age and race of the men and the year in which they were enumerated. What is more, a majority of the men who were living in group quarters were living in military quarters or correctional institutions. Rindfuss and Stephen also speculate that dual-career couples comprise a growing fraction of couples who live apart, but they do address the issue empirically.

2 Prevalence of marital non-cohabitation

This paper uses data from the 5-percent sample of the 2000 United States census, accessed through the Integrated Public Use Microdata Series (IPUMS) database (Ruggles et al., 2010). Data from the census are well suited for studying marital non-cohabitation for two reasons. First, the census provides large, nationally representative samples of the United States population. Because marital non-cohabitation is a relatively rare family form, samples selected using probability methods must be large to include a substantial number of non-cohabitators. Second, the census records both the composition of sampled households and the marital status of household residents. This treatment of living arrangements as distinct from family relationships allows me to identify non-cohabitators indirectly, as men and women who are married but whose spouse is not enumerated in their household.

The census questionnaire asks respondents to classify the marital status of each member of their household as “now married,” “widowed,” “divorced,”

“separated,” or “never married.” The IPUMS database combines responses to the question about marital status with information about the relationships between household members to further classify married men and women as “spouse present” or “spouse absent.” Specifically, the IPUMS programming rules link spouses within households using the reported relationships of household members to the household head, the order in which household members are listed on the census form, and the ages of household members. The database then classifies married men and women as “spouse absent” if they are not linked to a spouse within their household.

The primary limitation of this method for identifying non-cohabitators is that I observe only half of a cohabiting couple. The census does not link spouses across households; consequently, I have no information about the demographic or occupational characteristics of the absent spouse. Studying individual non-cohabitators in isolation is not ideal because the location decisions of couples are joint decisions that depend on the personal and professional commitments of both partners. If one partner in a couple is geographically flexible, then inflexibility of the other partner will pose little problem for the couple. But if both partners are geographically inflexible, then the probability that the couple will face dual-career location problems is high. Because my analysis omits measures of spousal characteristics, and because educational attainment and occupational characteristics are correlated within couples, the regression estimates I present in this paper do not have a causal interpretation.

The goal of this paper is to assess the consistency of evidence from the census with the hypothesis that dual-career location constraints play a role in the decision of some couples to live apart. To this end, my primary research sample includes men and women from the census sample who were between the ages of 25 and 54, who had a college degree or more, who reported that they were “married” and not “separated,” who worked for pay in the five years preceding the census, who reported a civilian occupation, and who lived in a household rather than group quarters. I classify the educational attainment of men and women in the sample according to their highest degree completed, using the following four categories: college degree, master’s degree, professional degree, and doctorate. I code professional degrees as higher than master’s degrees and doctorates as higher than professional degrees. Because the census sample is a weighted sample, I compute all estimates of population parameters using person-level sampling weights.

Descriptive results from the primary sample indicate that marital non-

cohabitation is unusual but not unknown among highly educated workers. Of all married workers with a college degree or more, 1.9 percent were living apart from their spouse at the time of the census. Table 1 shows the proportion of married workers who were living apart from their spouse within groups defined by age, sex, and educational attainment. Consistent with the idea that some couples choose non-cohabitation as a solution to the dual-career location problem, the results in Table 1 indicate that the prevalence of non-cohabitation increases with educational attainment. Among workers whose highest degree was a college degree, 1.9 percent of men and 1.7 percent of women were living apart from their spouse; among workers whose highest degree was a doctorate, 2.9 percent of men and 3.5 percent of women were living apart.

Like Rindfuss and Stephen (1990), I find that non-cohabitation is more common at younger ages. Among workers younger than 30, 4.2 percent of men and 2.8 percent of women were living apart from their spouse; among workers between the ages of 40 and 54, 1.6 percent of both men and women were living apart.¹ The greater prevalence of non-cohabitation at younger ages may reflect the concentration of key demographic transitions, including marriage, childbearing, and school completion, at those ages. For example, a couple might live apart temporarily because one partner moves for a new job while the other remains behind to finish school. Younger workers are also be less likely than older workers to have children, so they may view non-cohabitation as less burdensome.² Most relevant for an analysis of dual-career location constraints, the experience and training obtained in early jobs is an important determinant of long-term career trajectories. Younger workers may therefore anticipate higher professional returns than older workers from the personal sacrifice entailed in living apart.

In addition to differences in the prevalence of non-cohabitation by educational attainment and age, the results in Table 1 show different patterns of non-cohabitation by sex. In particular, I find that men are more likely than

¹I treat workers between the ages of 40 and 54 as a single age group because preliminary analyses showed little difference in results between workers in the 40-44, 45-49, and 50-54 age groups.

²Living apart when children are young is more difficult than living apart when they are older or have left home (Gross, 1980; Gerstel and Gross, 1982); consequently, one might expect concerns about parenting to discourage non-cohabitation primarily among workers in the middle age groups. The results in Table 1, however, do not show evidence of a rise in non-cohabitation at older ages.

Table 1: Proportion of married workers living in household without spouse

	College	Master's	Profes- sional	Doc- torate	Total
Men					
Age 25-29	0.038 (0.001)	0.056 (0.003)	0.055 (0.005)	0.061 (0.011)	0.042 (0.001)
Age 30-34	0.023 (0.001)	0.027 (0.001)	0.030 (0.002)	0.048 (0.005)	0.025 (0.001)
Age 35-39	0.018 (0.001)	0.018 (0.001)	0.024 (0.002)	0.031 (0.003)	0.019 (0.000)
Age 40-54	0.015 (0.000)	0.016 (0.000)	0.014 (0.001)	0.024 (0.001)	0.016 (0.000)
Total	0.019 (0.000)	0.020 (0.000)	0.020 (0.001)	0.029 (0.001)	0.020 (0.000)
<i>N</i>	331,546	122,123	52,594	24,192	530,455
Women					
Age 25-29	0.026 (0.000)	0.031 (0.000)	0.049 (0.000)	0.052 (0.000)	0.028 (0.000)
Age 30-34	0.016 (0.000)	0.019 (0.000)	0.027 (0.000)	0.044 (0.000)	0.018 (0.000)
Age 35-39	0.014 (0.000)	0.015 (0.000)	0.021 (0.000)	0.034 (0.000)	0.015 (0.000)
Age 40-54	0.016 (0.000)	0.015 (0.000)	0.020 (0.000)	0.032 (0.000)	0.016 (0.000)
Total	0.017 (0.000)	0.017 (0.000)	0.025 (0.000)	0.035 (0.000)	0.018 (0.000)
<i>N</i>	328,154	122,057	30,721	10,911	491,843

Source: IPUMS, 2000 United States census, 5-percent sample (Ruggles et al., 2010).

Notes: Standard errors in parentheses. Sample includes men and women, age 25 to 54, who reported that they were “married” and not “separated,” who worked for pay in the five years preceding the census, who reported a civilian occupation, and who lived in a household rather than group quarters. Educational attainment is highest degree earned, where professional degrees are higher than master’s degrees and doctorates are higher than professional degrees. Estimates were computed using person-level sampling weights.

women to live apart from their spouse, both overall and within most age groups. This result is surprising. If occupation-related location constraints increase with educational attainment, and if highly educated women are more likely than highly educated men to have a spouse with educational attainment that equals or exceeds their own, then women in my sample would be more likely than men to face dual-career location problems. To the extent that non-cohabitation is a solution to such problems, women would thus be more likely than men to live apart from their spouse.

While the greater prevalence of non-cohabitation among men is not clearly consistent with the hypothesis that non-cohabitation is motivated by dual-career location constraints, there are reasons, unrelated to location choices, that such a pattern might arise. Rindfuss and Stephen (1990), who observe the same pattern in a census sample that includes men and women without college degrees, point out that husbands tend to be slightly older than wives and that this tendency, combined with the greater prevalence of non-cohabitation at younger ages, could result in men living apart more frequently than women in the same age group. The greater prevalence of non-cohabitation among men may also reflect differences in the reporting of living arrangements between husbands and wives. Anderson and Spruill (1993) find that husbands are more likely than wives to do all or most of the commuting when couples live apart. If some husbands enumerate themselves at a secondary residence while their wives enumerate them at the couple's primary residence, then the husbands would appear as non-cohabitators while the wives would not.

More consistent with a link between non-cohabitation and dual-career location constraints is the greater prevalence of non-cohabitation among women, relative to men, at older ages and at higher levels of education. Among workers whose highest degree was a college or master's degree, women were less likely than men to live apart from their spouse in all but the oldest age group and less likely to live apart overall. In contrast, among workers whose highest degree was a professional degree or doctorate, women were less likely than men to live apart at younger ages but more likely to live apart at older ages and more likely to live apart overall. Thus, at the ages where non-cohabitation is least common among the broader population and in the education groups where occupation-related location constraints are most severe, the sex most likely to partner with similarly constrained spouses is the sex most likely to live apart.

3 Occupational mobility and concentration

Measuring the geographic concentration of workers in an occupation or their mobility rate across locations requires an operational definition of a location. Following McKinnish (2008), whose measure of occupational mobility I discuss below, I define a location as a metropolitan area or a non-metropolitan Public Use Microdata Area (PUMA). A PUMA is a census-defined area with between 100 and 200 thousand residents. In the 2000 census, all PUMAs respected state boundaries and most respected county boundaries. Some PUMAs, however, crossed the boundaries of metropolitan areas, and the census data do not identify the metropolitan status of people who lived in these PUMAs. Because I cannot assign accurate location codes to these people, I exclude them from the samples I use to measure the geographic characteristics of the census occupations.³

The census data classify civilian occupations using 471 occupation codes. I measure the geographic concentration of each occupation using an occupational clustering index developed by Benson (2011). Specifically, I define the level of clustering in occupation i across locations $j = 1, \dots, J$ to be

$$C_i = \frac{1}{2} \sum_{j=1}^J \left| \frac{n_{ij}}{n_i} - \frac{n_j - n_{ij}}{n - n_i} \right|,$$

where n represents the total number of workers in the sample, n_i represents the number of workers who work in occupation i , n_j represents the number of workers who live in location j , and n_{ij} represents the number of workers who both work in occupation i and live in location j . This index, which takes values between zero and one, gives the proportion of all workers in an occupation who would have to change locations to equalize the proportion of workers in the occupation across locations. I compute clustering values using the sample of men and women, age 25 to 54, who worked for pay in the five years preceding the census, who reported a civilian occupation, and who lived in a metropolitan area.⁴ I do not compute clustering values for occupations held by fewer than 30 workers.

³McKinnish (2008) reports that her findings regarding the association between occupational mobility and the migration decisions and earnings of married couples are comparable when she defines a location as a state rather than in the manner described here.

⁴I restrict the sample to residents of metropolitan areas because my definition of a location separates metropolitan areas from non-metropolitan areas, and I do not want the clustering index to identify predominantly rural or predominantly urban occupations as

I measure the mobility rate in each occupation using the method of McKinnish (2008). In addition to their location in the census year, the census data identify the location where workers were living five years prior to the census. I identify workers as having migrated in the five years preceding the census if they changed locations according to the definition of given above. Specifically, I identify workers as having moved if they (1) migrated between metropolitan areas, (2) migrated between a metropolitan area and a non-metropolitan PUMA, or (3) migrated between non-metropolitan PUMAs. I compute mobility rates using the sample of men and women, age 25 to 54, who worked for pay in the five years preceding the census, who reported a civilian occupation, who lived in the United States in 1995, and whose metropolitan status could be identified in both 1995 and 2000. I do not compute mobility rates for occupations held by fewer than 30 workers.

Table 2 shows the average occupational mobility rate and clustering value, and the correlation between the mobility rate and the clustering value, for subgroups of the primary sample defined by sex and educational attainment. Two patterns are notable in the table. First, for both men and women, both average mobility and average clustering increase with education. Second, with the exception of men with professional degrees, the correlation between mobility and clustering is positive within each group. Consistent with the findings of previous studies, the results in Table 2 also suggest that, on average, women work in lower-mobility and lower-clustering occupations than men (McKinnish, 2008; Benson, 2011).

4 Predictors of marital non-cohabitation

Because educational attainment, occupational mobility, and occupational clustering are correlated, this section uses logistic regression to estimate the independent effects of these variables on the probability of marital non-cohabitation. Specifically, I estimate the following logistic regression model

highly clustered when these occupations may be highly dispersed across rural and urban locations, respectively. If I instead restrict the sample to residents of non-metropolitan areas, I obtain similar results.

Table 2: Average occupational mobility rate and clustering value, and correlation between mobility rate and clustering value

	Men			Women		
	Mobil- ity	Clus- tering	Corre- lation	Mobil- ity	Clus- tering	Corre- lation
College	0.184 (0.050)	0.149 (0.078)	0.369	0.170 (0.041)	0.118 (0.060)	0.511
Master's	0.197 (0.055)	0.152 (0.076)	0.527	0.179 (0.047)	0.121 (0.061)	0.677
Professional	0.227 (0.065)	0.156 (0.047)	-0.061	0.206 (0.065)	0.143 (0.050)	0.244
Doctorate	0.248 (0.067)	0.191 (0.078)	0.528	0.238 (0.068)	0.176 (0.072)	0.671

Source: IPUMS, 2000 United States census, 5-percent sample (Ruggles et al., 2010).

Notes: Standard deviations in parentheses. Sample and classification of educational attainment are described in notes of Table 1. Clustering value is the proportion of workers in an occupation who would have to change locations to equalize the proportion of workers in the occupation across locations (Benson, 2011). Mobility rate is the proportion of workers in an occupation who, in the five years preceding the census, (1) migrated between metropolitan areas, (2) migrated between a metropolitan area and a non-metropolitan PUMA, or (3) migrated between non-metropolitan PUMAs (McKinnish, 2008). Clustering values and mobility rates were computed for occupations with at least 30 workers using the sample of men and women, age 25 to 54, who worked for pay in the five years preceding the census, who reported a civilian occupation, who lived in a metropolitan area (clustering), who lived in the United States in 1995 (mobility) and whose metropolitan status could be identified in both 1995 and 2000 (mobility). Estimates were computed using person-level sampling weights.

using data from the primary research sample:

$$\begin{aligned} \log \left(\frac{\Pr(NC_{ios} = 1)}{\Pr(NC_{ios} = 0)} \right) = & \beta_0 + \beta_1 Mast_i + \beta_2 Prof_i + \beta_3 Doc_i \\ & + \beta_4 Mob_o + \beta_5 Mob_o^2 + \beta_6 Clust_o + \beta_7 Clust_o^2 \\ & + \mathbf{X}_i \boldsymbol{\gamma} + \mathbf{State}_s \boldsymbol{\delta}. \end{aligned} \quad (1)$$

NC_{ios} is an indicator that equals one if worker i in occupation o and state s was living apart from his or her spouse. $Mast_i$, $Prof_i$, and Doc_i are indicators that equal one if the highest degree worker i had earned was a master's degree, professional degree, and doctorate, respectively. The reference group is workers who had earned a college degree but not a graduate or professional degree. Mob_o and $Clust_o$ are the mobility rate and clustering value for occupation o . $\mathbf{X}_i$ is a vector of control variables that includes income from wages and self-employment in the reference year for the census; age and age squared; indicators for American Indian, Asian, black, Pacific Islander, white, and other racial identification; an indicator for Hispanic ethnicity; and an indicator for metropolitan residence.⁵ $\mathbf{State}_s$ is a vector of state fixed effects.

Table 3 presents estimates of the average marginal effects of the proxies for occupation-related location constraints on the probability of marital non-cohabitation, along with the standard errors of the estimates. Column (1) presents estimates separately by sex, for all men and women in the primary research sample. For both men and women, the estimates in column (1) indicate that the probability of non-cohabitation increases with educational attainment. Compared with workers whose highest degree was a college degree, those whose highest degree was a master's degree were between one- and two-tenths of a percentage point more likely to live apart from their spouse. Workers whose highest degree was a professional degree were approximately one-half of a percentage point more likely to live apart, and those whose highest degree was a doctorate were almost a full percentage point more likely to live apart. The pattern of results does not vary substantially by

⁵I do not include measures of parental status in the model because the measures that can be constructed from the census data are not accurate for non-cohabiters. In particular, the census data do not link parents to children outside their household, so non-cohabiters whose children live with their spouse would appear as childless. This undercounting of children is probably more severe for men than for women, but previous research suggests that a non-trivial minority of non-cohabiting wives have children who live primarily with their husbands (Anderson and Spruill, 1993).

sex, and with the exception of the coefficient on the indicator for a master's degree in the regression for women, the coefficients on all of the education indicators are statistically significant. While the magnitudes of the estimates in column (1) are modest in absolute terms, they represent substantively important increases in the probability of non-cohabitation relative to the low baseline prevalence in the population.

With respect to occupational characteristics, the results in column (1) show a negative association between occupational mobility and the probability of non-cohabitation. On average, a 5 percentage-point increase in the mobility rate in a worker's occupation decreases the probability that the worker lives apart from his or her spouse by approximately two-tenths of a percentage point. In contrast, the results show a negative association between occupational clustering and the probability of non-cohabitation. An increase of 5 percentage points in the clustering value for an occupation increases the probability that a worker lives apart from his or her spouse by just under one-tenth of one percentage point for men and just under two-tenths of a percentage point for women.

The remaining columns in Table 3 present results from removing the education indicators from the model in equation (1) and estimating the model separately for men and women at each level of education. For men, the overall pattern of results in columns (2) through (5) is similar to the pattern in column (1); the association between occupational mobility and non-cohabitation is always negative, and with one exception, the association between occupational clustering and non-cohabitation is always positive. The exception to this general pattern is the negative and statistically significant association between occupational clustering and non-cohabitation for men with professional degrees.

For women, the results in columns (2) through (5) are more varied. Women with college degrees, like both men and women overall, are less likely to live apart from their spouse when they work in an occupation with higher mobility and are more likely to live apart when they work in an occupation with higher clustering. The same is true of women with master's degrees, although the estimated effect of mobility is not statistically significant. For women with professional degrees, neither mobility nor clustering has a substantively or statistically significant association with the probability of non-cohabitation. Finally, for women with doctorates, the coefficients on mobility and clustering are comparatively large, and their signs are reversed relative to the coefficients for women overall. These estimates, however, are

Table 3: Average marginal effect of occupational mobility and clustering on probability of living in household without spouse

	All	College	Master's	Profes- sional	Doc- torate
	(1)	(2)	(3)	(4)	(5)
Men					
Master's	0.002*** (0.001)				
Professional	0.006*** (0.001)				
Doctorate	0.009*** (0.001)				
Mobility	-0.041*** (0.005)	-0.035*** (0.007)	-0.062*** (0.012)	-0.018 (0.014)	-0.078*** (0.024)
Clustering	0.017*** (0.004)	0.017*** (0.005)	0.042*** (0.009)	-0.041** (0.016)	0.021 (0.022)
<i>N</i>	497,604	309,688	114,984	49,690	22,765
Women					
Master's	0.001 (0.001)				
Professional	0.005*** (0.001)				
Doctorate	0.010*** (0.001)				
Mobility	-0.036*** (0.007)	-0.047*** (0.009)	-0.020 (0.015)	0.001 (0.026)	0.070 (0.043)
Clustering	0.038*** (0.006)	0.042*** (0.007)	0.051*** (0.011)	-0.009 (0.025)	-0.062 (0.044)
<i>N</i>	457,956	304,870	113,739	28,664	10,149

Source: IPUMS, 2000 United States census, 5-percent sample (Ruggles et al., 2010).

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Average marginal effects estimated by logistic regression. Standard errors in parentheses. Dependent variable is indicator for living in household without spouse. Model includes indicators for highest degree, with college degree as the reference category; mobility rate and mobility rate squared; clustering value and clustering value squared; income from wages and self-employment; age and age squared; indicators for American Indian, Asian, black, Pacific Islander, white, and other racial identification; an indicator for Hispanic ethnicity; an indicator for metropolitan residence; and state fixed effects. Sample and classification of educational attainment are described in notes of Table 1. Computation of clustering values and mobility rates is described in notes of Table . Estimates were computed using person-level sampling weights.

not statistically significant.

5 Discussion

The results in this paper indicate that marital non-cohabitation, while uncommon overall, is considerably more common among workers with advanced degrees than workers with only college degrees. This finding is consistent with the hypothesis that, for some couples, non-cohabitation is motivated dual-career location constraints. Also consistent with the hypothesis is the finding that workers are more likely to live apart from their spouse when they work in occupations where jobs – and presumably employment opportunities – are unequally distributed across locations.

Unexpectedly, however, the results in this paper also indicate that workers are less likely to live apart from their spouse when they work in occupations with high rates of geographic mobility. A possible explanation for this finding is that, for some workers, mobility in their spouse’s occupation presents an opportunity rather than a constraint. In his seminal theory of family migration, Mincer (1978) suggested that joint location decisions created both “tied movers,” and “tied stayers,” with the former suffering work-related losses when they followed a spouse to a new location and the latter suffering losses when remained in a privately suboptimal location for the benefit of a spouse. To the extent that men and women in high-mobility occupations are less likely than those in low-mobility occupations to make tied stayers of their spouses, they may also be less likely to adopt non-cohabitation as an alternative to arrangements involving tied stayers. In light of the evidence presented here however, this explanation is purely speculative.

Taking a broader perspective, this paper highlights a non-traditional family arrangement in keeping with widespread changes in the relationship between families and labor markets. The past half century has witnessed a historic increase in women’s labor force participation and a concomitant increase in the proportion of families who diverge from the traditional, gendered breadwinner-caretaker model. Among these non-traditional families are a growing number that extend across multiple households for reasons such as divorce, non-marital childbearing, incarceration, transnational migration, and the voluntary maintenance by couples of separate households in a single location (Cherlin, 2010). Marital non-cohabitation, like these other arrangements, challenges longstanding assumptions about what it means to

be a family and points to a growing need for social and demographic researchers to document cross-household kinship ties.

References

- Anderson, Elaine A., and Jane W. Spruill.** 1993. "The Dual-Career Commuter Family:." *Marriage & Family Review*, 19(1-2): 131–147.
- Bailey, Adrian J., and Thomas J. Cooke.** 1998. "Family Migration and Employment: The Importance of Migration History and Gender." *International Regional Science Review*, 21(2): 99–118.
- Benson, Alan.** 2011. "A Theory of Dual Job Search and Sex-Based Occupational Clustering." Massachusetts Institute of Technology, Sloan School of Management.
- Bielby, William T., and Denise D. Bielby.** 1992. "I Will Follow Him: Family Ties, Gender-Role Beliefs, and Reluctance to Relocate for a Better Job." *American Journal of Sociology*, 97(5): 1241–1267.
- Boyle, Paul, Thomas Cooke, Keith Halfacree, and Darren Smith.** 2003. "The Effect of Long-Distance Family Migration and Motherhood on Partnered Women's Labour-Market Activity Rates in Great Britain and the USA." *Environment and Planning A*, 35: 2097–2114.
- Boyle, Paul, Thomas J. Cooke, Keith Halfacree, and Darren Smith.** 2001. "A Cross-National Comparision of the Impact of Family Migration on Women's Employment Status." *Demography*, 38(2): 201–213.
- Cherlin, Andrew J.** 2010. "Demographic Trends in the United States: A Review of Research in the 2000s." *Journal of Marriage and Family*, 72(3): 403–419.
- Compton, Janice, and Robert A. Pollak.** 2007. "Why Are Power Couples Increasingly Concentrated in Large Metropolitan Areas?" *Journal of Labor Economics*, 25(3): 475–512.
- Cooke, Thomas J.** 2001. "Trailing Wife or Trailing Mother? The Effect of Parental Status on the Relationship Between Family Migration and the Labor-Market Participation of Married Women." *Environment and Planning A*, 33(3): 419–430.
- Cooke, Thomas J.** 2003. "Family Migration and the Relative Earnings of Husbands and Wives." *Annals of the Association of American Geographers*, 93(2): 338–349.

- Cooke, Thomas J., Paul Boyle, Kenneth Couch, and Peteke Feijten.** 2009. "A Longitudinal Analysis of Family Migration and the Gender Gap in Earnings in the United States and Great Britain." *Demography*, 46(1): 147–167.
- Costa, Dora L., and Matthew E. Kahn.** 2000. "Power Couples: Changes in the Locational Choice of the College Educated, 1940-1990." *The Quarterly Journal of Economics*, 115(4): 1287–1315.
- Gemici, Ahu.** 2008. "Family Migration and Labor Market Outcomes." Department of Economics, New York University Working Paper.
- Gerstel, Naomi, and Harriet Engel Gross.** 1982. "Commuter Marriages." *Marriage & Family Review*, 5(2): 71–93.
- Gross, Harriet Engel.** 1980. "Dual-Career Couples Who Live Apart: Two Types." *Journal of Marriage and Family*, 42(3): 567–576.
- Guler, Bulent, Fatih Guvenen, and Giovanni L. Violante.** 2009. "Joint-Search Theory: New Opportunities and New Frictions." National Bureau of Economic Research Working Paper 15011.
- Jacobsen, Joyce P., and Laurence M. Levin.** 2000. "The Effects of Internal Migration on the Relative Economic Status of Women and Men." *Journal of Socio-Economics*, 29(3): 291–304.
- Jurges, Hendrik.** 2006. "Gender Ideology, Division of Housework, and the Geographic Mobility of Families." *Review of Economics of the Household*, 4: 299–323.
- Lee, Sanghoon, and Jinxiong Li.** 2008. "The Co-location Problem and the Recruiting Policies of Academic Couples." University of Minnesota Job Market Paper.
- Lichter, Daniel T.** 1980. "Household Migration and the Labor Market Position of Married Women." *Social Science Research*, 9(1): 83–97.
- Lundberg, Shelly, and Robert A. Pollak.** 2003. "Efficiency in Marriage." *Review of Economics of the Household*, 1: 153–167.
- McKinnish, Terra.** 2008. "Spousal Mobility and Earnings." *Demography*, 45(4): 829–849.

- Mincer, Jacob.** 1978. "Family Migration Decisions." *Journal of Political Economy*, 86(5): 749–773.
- Rabe, Birgitta.** 2006. "Dual-Earner Migration in Britain: Earnings Gains, Employment, and Self-Selection." Institute for Social and Economic Research ISER Working Paper 2006-1.
- Rhodes, Angel R.** 2002. "Long-Distance Relationships in Dual-Career Commuter Couples: A Review of Counseling Issues." *The Family Journal*, 10(4): 398–404.
- Rindfuss, Ronald R., and Elizabeth Hervey Stephen.** 1990. "Marital Noncohabitation: Separation Does Not Make the Heart Grow Fonder." *Journal of Marriage and the Family*, 52(1): 259–270.
- Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew. Sobek.** 2010. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota.
- Sandell, Steven H.** 1977. "Women and the Economics of Family Migration." *The Review of Economics and Statistics*, 59(4): 406–414.
- Shauman, Kimberlee A.** 2010. "Gender Asymmetry in Family Migration: Occupational Inequality or Interspousal Comparative Advantage?" *Journal of Marriage and Family*, 72(2): 375–392.
- Shauman, Kimberlee A., and Mary C. Noonan.** 2007. "Family Migration and Labor Force Outcomes: Sex Differences in Occupational Context." *Social Forces*, 85(4): pp. 1735–1764.
- Shauman, Kimberlee A., and Yu Xie.** 1996. "Geographic Mobility of Scientists: Sex Differences and Family Constraints." *Demography*, 33(4): pp. 455–468.
- Shihadeh, Edward S.** 1991. "The Prevalence of Husband-Centered Migration: Employment Consequences for Married Mothers." *Journal of Marriage and the Family*, 53(2): 432–444.
- Spitze, Glenna.** 1984. "The Effect of Family Migration on Wives' Employment: How Long Does It Last?" *Social Science Quarterly*, 65(1): 21–36.