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Gender Asymmetry in Family Migration: Occupational Inequality or Interspousal Comparative Advantage?

This paper examines gender inequality in the determinants of job-related long-distance migration among married dual-earner couples during the 1980s and 1990s. The analysis tested the structural explanation, which attributes gender asymmetry in family migration to structural inequality in the labor market, and the comparative advantage explanation derived from relative resource theory. The analysis used individual- and family-level data from 5,504 Panel Study of Income Dynamics families, occupation-level data from the 1980–2000 U.S. Decennial Censuses Integrated Public Use Micro Samples, and discrete-time event history models. Gender differences in the determinants of family migration were not explained by gender differences in occupational characteristics, but the results partially support the relative resource theory by illustrating the conditioning influence of interspousal comparative advantage.

Despite significant increases in women's educational attainment, labor force attachment, occupational prestige, and earnings, the long-distance migration of families continues to be motivated disproportionately by the employment dynamics of the male partners in dual-earner families.

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Key Words: demography, dual-earner, family economics, family roles, labor market.

Empirical studies show that neither the prestige of the wife's occupation nor the proportionate size of her contribution to the total family income significantly affects family migration decisions (Duncan & Perrucci, 1976; Lichter, 1983; Long, 1974; Shihadeh, 1991). Researchers often attribute this gender asymmetry to familial gender ideology, yet definitive conclusions about the role of gender ideology in family migration behavior are premature, because theoretically justified alternative explanations have not been adequately tested. In particular, the literature lacks systematic tests of both the structural explanation, which attributes gender asymmetry in family migration to structural inequality in the labor market, and of the comparative advantage explanation derived from relative resource theory. Consequently, an accurate accounting of the individual, familial, and structural causes of gender asymmetry in family migration has yet to be accomplished.

The topic of migration among dual-earner families is of growing importance to the experience of individuals and families in the United States as two-income families have become demographically predominant and as lateral employment transitions have become a primary mechanism for career development and earnings growth. This paper adds to the family migration literature in three ways. First, by focusing on job-related long-distance migration among dual-earner married couples during the 1980s and 1990s, this analysis offers a more specific test of the microeconomic model of family

migration than most prior research has accomplished. Second, by incorporating measures of relevant occupational characteristics, this paper accomplishes a more direct test of the structural explanation than has yet been reported. Third, utilizing parallel data for partners in married couples to operationalize the concept of comparative advantage allows a novel model specification that directly tests the implications of relative resource theory for gender asymmetry in family migration.

*Gender Symmetry in Family Migration:
Theoretical Perspectives and Empirical
Evidence*

Employment considerations are the main motivation for long-distance migration (Boyle, Feng, & Gayle, 2009; Long, 1988), so human capital characteristics tend to be among the primary determinants of long-distance migration (DaVanzo, 1978; Long, 1988). In the context of dual-earner families, however, the determinants of migration are less distinct because relocation decisions are family based whereas labor market opportunities are individually based.

According to Mincer's (1978) microeconomic theory of migration, the prevailing model of family migration, families move when the benefits to the family from doing so outweigh the costs, and family utility, a concept that is most often measured monetarily, is thereby maximized. For married couples, family utility is conceptualized as the net balance of the spouse-specific costs and benefits associated with a migration. A family migration event is therefore prompted by a significant net gain for *at least one* marital partner, because a net gain for the family does not require that both partners experience a personal gain. Individual family members are assumed to subjugate their own rational interests to the interests of the family as a whole when migration is considered, and in so doing they may forgo opportunities from which they would benefit personally (Bielby & Bielby, 1992). Mincer introduced the concept of a "tied" partner and others have used the term "trailing spouse" (Bruegel, 1996; Cooke, 2001) to characterize the marital spouse whose "gains from migration are (in absolute value) dominated by gains (or losses) of the spouse" (Mincer, 1978, p. 751). Given that the "private" calculus of the tied partner contradicts the family migration decision, his or her characteristics

are unlikely to be strongly related to family migration behavior.

The microeconomic model of family migration is formally symmetrical in its treatment of husbands and wives: Family migration decisions are conceptualized as the result of a rational analysis of the joint utility of migration in which the potential gains and losses to each individual are given equal weight regardless of gender or familial role (Bielby & Bielby, 1992). This assumption of spousal symmetry implies the hypothesis that wives with human capital stocks equal to that of their husbands have an equal role in relocation decisions and an equal likelihood, therefore, of experiencing tied migration (Duncan & Perrucci, 1976).

Similar predictions of gender symmetry are derived from relative resource theory (Blood & Wolfe, 1960), despite the fact that the relative resource and microeconomic theories are premised on very different priors about the family decision-making process. In contrast to the underlying assumption of the microeconomic model that "family welfare maximization" drives decision making (Mincer, 1978), relative resource theory conceptualizes family migration as an individual-level decision of the family member who controls the greatest resources and has, therefore, the power to pursue his or her own interests with minimal regard to the consequences for other family members (Bielby & Bielby, 1992; Hood, 1983). From this perspective, the partner in a dual-earner couple who has the comparative advantage in earnings and other aspects of human capital that predict earnings capacity will have the power to direct relocation decisions and to maximize personal utility, regardless of his or her gender and irrespective of the net family utility. Relative resource theory therefore predicts that the characteristics of the partner with the greater relative earnings will predict family migration and that this triggering effect of the comparative advantage will operate symmetrically by gender.

The expectation of gender symmetry within the family is contradicted by many studies that find significant disparities in the influence of husbands' and wives' characteristics on family migration. Research shows that even among families in which the wife is the primary earner, wives' characteristics do not predict family migration and that when women's human capital characteristics do influence family migration, the effects are not symmetrical by

sex (Bird & Bird, 1985; Juerges, 2006; Lichter, 1980, 1982; Long, 1974; Shihadeh, 1991). Additional evidence of gender asymmetry in family migration decisions comes from the large body of research documenting the negative impact that family migration has on married women's labor force participation and earnings, declines that are not offset by their husband's gains as the microeconomic perspective predicts (e.g., Boyle, Cooke, Halfacree, & Smith, 2001; Cooke, 2003; Gemici, 2008; Shauman & Noonan, 2007).

Explanations of Gender Asymmetry in Family Migration

Mincer's (1978) neoclassical microeconomic theory of family migration provides an explanation of gender asymmetry that has received scant empirical attention. Although the formal properties of the neoclassical model are gender neutral, Mincer recognized that the context of gender segregation and inequality in the labor force, and the gap in earnings power that it produces, structure asymmetry between spouses in decision making about family events such as migration.

Persistent occupational gender segregation in the United States leads women and men to work in separate occupations that have distinct structural characteristics (Bianchi, 1995; Bielby & Baron, 1986). "Women's" jobs tend to be located in the service sector of the economy, to be more geographically ubiquitous, and to lack extended occupational ladders that define a "career." In addition, female-dominated jobs offer lower average wages, lower occupational prestige, and lesser occupational autonomy and authority than do male-dominated occupations (England, Farkas, Kilbourne, & Dou, 1988; Spain & Bianchi, 1996). These structural characteristics of female-dominated jobs mean that, on average, women will be faced with fewer remote employment opportunities than men and that the opportunities that do arise for women will offer lesser net gains than the opportunities that occur for men. Married women, therefore, are less likely than married men both to initiate family moves (because their gains from remote career opportunities are unlikely to exceed their husbands' losses from migration) and to resist moves (because their net loss of earnings is likely to be offset by the potential income gains associated

with remote opportunities for their husbands). Furthermore, because of the geographic ubiquity of "women's" jobs, replacing lost employment is less likely to require relocation for women than for men. Mincer (1978) argued that even for egalitarian marriages that pair partners with equal human capital investments, the influence of occupational gender segregation will generate gender asymmetry in family migration decisions "unless [marital] endogamy were to extend to the most detailed occupational characteristics of spouses" (p. 754).

The empirical implication of the structural explanation is that, without controls for gender differences in the distribution of occupational characteristics, it is not possible to assess if the weak association between migration events and wives' human capital characteristics reflects the influence of structural gender inequality in the labor market or gender inequality (in the allocation of roles, prioritizing of careers, power in decision making, etc.) within the family. Researchers have recognized the influence of occupational context on family migration processes (Halfacree, 1995), but the structural explanation has not been adequately tested because prior research has included only weak indicators of occupational segregation (Duncan & Perrucci, 1976), basic controls for occupation or industry (Boyle et al., 2001; Bruegel, 1999; Jacobsen & Levin, 1997), or indicators of occupational status (Boyle, Cooke, Halfacree, & Smith, 1999, 2003). This study directly tests if gender differences in the distribution of specific migration-related occupational characteristics can explain gender differences in the determinants of family migration among married couples.

The structural explanation competes with the gendered family role explanation of gender asymmetry in family migration. According to this perspective, asymmetry in the determinants of family migration is generated by the conditioning influences of gender ideology and the gendered allocation of roles within the family (Hood, 1983). Gender ideology structures mutual expectations about behavior and responsibilities within the family and thereby has a profound impact on the family decision-making process (Hochschild, 1989; Hood, 1983). The influence of gender ideology prevents roles within the family from being exchangeable: Family members are neither perfectly adaptable to migration costs and opportunities, as is

implied by the microeconomic model assumption of gender symmetry (Bielby & Bielby, 1992; Halfacree, 1995), nor do they gain the same degree of power from a comparative earnings advantage or wield it in identical ways, as is predicted by relative resource theory (Blood & Wolfe, 1960).

The influence of gender ideology to produce asymmetry in family decision making is reflected by the persistent practice of defining men as household head and family breadwinner even in families where men's earnings and labor force attachment are exceeded by those of their wives (Biddlecom & Kramarow, 1998; Potuchek, 1992, 1997). Furthermore, studies show that the division of household labor continues to be traditional even in dual-earner families in which the majority of the family income is earned by the wife (Bittman, England, Sayer, Folbre, & Matheson, 2003; Gupta, 2007). In the few analyses of family migration decisions that directly measure the influence of gender ideology, husband's career is usually considered primary even in dual-career families, and migration is most often governed by the husband's characteristics (Bielby & Bielby, 1992; Hardill, Green, Dudleston, & Owen, 1997), except in households with an observed commitment to egalitarianism (Juerges, 2006).

Hypotheses

Because the nationally representative data sources appropriate for studying the determinants of family migration lack direct measures of gender ideology, the extant research relies on indirect empirical support for the gender role explanation: Significant disparities in the estimated effects of husbands' and wives' human capital and employment characteristics on family migration behavior are interpreted as evidence of the influence of gender roles. This study refines this empirical approach in three ways that allow a more precise test of the relative explanatory power of (a) Mincer's structural explanation and relative resource theory and (b) the gender role explanation of gender asymmetry in the determinants of family migration.

First, as a direct test of Mincer's structural explanation, I tested for symmetry in the influence of husbands' and wives' human capital and employment characteristics in the presence of controls for occupational characteristics. If, as Mincer predicted, the observed

asymmetry in the influence of human capital and employment characteristics are the result of gender differences in the distribution of mobility-related occupational characteristics, the following hypothesis should be supported:

Symmetric distribution hypothesis: Gender asymmetry in the influence of individual-level determinants of family migration will become insignificant after controlling for gender differences in the distribution of occupational characteristics.

Second, I tested for symmetry in the estimated impact of husbands' and wives' occupational characteristics on family migration. Although prior research has supported the gender ideology explanation by identifying gender differences in the influence of human capital, income, and labor force participation on family migration events, finding significant disparities in the effects of spouses' occupational characteristics would bolster the gender ideology explanation by providing further evidence of asymmetry in the influence of spousal characteristics.

Symmetric influence hypothesis: The estimated effects of occupational characteristics on family migration behavior will be the same for husbands and wives.

Third, I operationalized the relative resource concept of comparative advantage to investigate if gender differences in the association between family migration and the characteristics of married spouses are caused by gender differences in the influence of comparative advantage. Relative resource theory posits that the influence of an individual-level characteristic on family decisions depends on the individual's comparative advantage over his or her marriage partner in the distribution of that characteristic. If comparative advantage is the mechanism that triggers the influence of an individual-level characteristic, then the greater influence of husbands' characteristics on family migration can be explained without invoking the direct influence of gendered family roles: It may be because of the overrepresentation of husband advantage in the distribution of characteristics that are positively associated with migration. As a test of the relative resource theory assumption of gender symmetry in the influence of comparative advantage, I tested for gender symmetry in the conditioning effect of comparative advantage for

all of the individual and occupational characteristics included in this analysis. In the absence of the influence of gender roles, the conditioning effect of the interspousal advantage should accrue equally to husbands and wives.

Symmetric influence of comparative advantage hypothesis: Interspousal comparative advantage will condition the influence of individual and occupational characteristics on family migration behavior in the same way for husbands and wives; in other words, the conditioning effect will not interact with sex.

METHOD

To test the hypotheses, I used individual- and family-level data from the Panel Study of Income Dynamics (PSID) and occupation-level data from the 1980–2000 U.S. Decennial Censuses Integrated Public Use Micro Samples (IPUMS; Ruggles et al., 2004). The PSID is a longitudinal study of a representative sample of U.S. individuals and their families. The original sample of about 5,000 families was interviewed annually from 1968 to 1997 and biennially thereafter. Because new PSID sample households are added through divorce and the maturity of the children of sample families, the original sample grew to nearly 8,500 families in 1996, but was subsequently reduced to 6,168 in 1997 to maintain its representation of the U.S. population. For this study I used data from families headed by married couples that remained intact for at least two consecutive interviews of the 1981 through 1997 waves of the PSID. Earlier years of the study were excluded because key variables were either unavailable or inconsistently measured. More recent years were excluded because the biennial data collection introduces inconsistent measurement of the migration risk period. The analytic sample includes 38,890 family-year observations from 5,504 families who contribute between 2 and 17 family-year observations. Families were included in the analytical sample if both spouses were aged 25–59 and employed at the start of each observation period (defined by consecutive waves of the PSID), if neither spouse has missing data for key variables (marital status, sex, migration status, occupation) or was a member of the armed forces, retired, permanently disabled, on public assistance, or in prison or jail at the start or at the end of an observation period. Given that marital dissolution is

an outcome that competes with family migration in the face of remote occupational opportunities (Boyle, Kulu, Cooke, Gayle, & Mulder, 2008; Gemici, 2008), I excluded any yearly observation of marriages that dissolved in separation or divorce. The sample also excluded individuals who were divorced at the initial year of observation and those who were cohabiting or maintaining a long-distance unmarried relationship. Because these couple statuses may be positively associated with career commitment and success, especially for women, their exclusion limits the generalizability of the results to couples in which traditional gender roles may be more salient.

The outcome variable for this study is a dichotomous indicator of job-related long-distance family migration, *move*, which combines self-reported reasons for migration with comparisons of year-specific geographic identifiers of the residential location of each family. Long-distance moves were identified by comparing family-specific geographic identifiers defined according to the 1990 Census from adjacent survey years. These include all moves between metropolitan areas, between metropolitan and nonmetropolitan areas, or county-to-county moves for those who did not live in a metropolitan area in either of the adjacent survey years. This operationalization of long-distance migration is comparable to studies that define interstate or intercounty migration as long distance, but it lacks the accuracy of studies that utilize specific information about distance moved (Boyle et al., 2009) in that it fails to distinguish short distance residential moves that happen to cross administrative boundaries. I used the PSID data on the reason for each self-reported migration to exclude residential migration from the operationalization of *move*. Moves for “purposive productive reasons” such as to take another job or because of a job transfer were defined as job related. These self-reported job-related moves accounted for 62% of all moves identified as long distance. For this analysis, “movers” (*move* = 1) were those respondents who moved a long distance for job-related reasons during each yearly period of observation.

I examined gender differences in the determinants of job-related long-distance family migration using a set of time-varying individual- and occupation-level covariates. To minimize endogeneity with a migration event, all covariates were evaluated at the start of each 1-year

interval. The focal individual-level covariates in this analysis include measures of demographic, human capital, and labor force characteristics that are known determinants of migration. All individual-level characteristics were operationalized identically for both husbands and wives in the married couples. *Age*, which is negatively associated with migration, is a continuous variable. Occupation is an important individual-level variable for this study, and although it is not directly included in the analysis, it is key to the operationalization of other variables. Occupation is measured with the detailed three-digit Census classification; 263 occupational categories are identified after the 1970 occupational codes (the classification scheme used for all years of the PSID) were harmonized with the classification schemes for 1980–2000 censuses. *Educational attainment*, which generally has a positive influence on migration, is measured with an ordinal variable that distinguishes those who attained at most a high school diploma, those who attended some college, those who attained a 4-year college degree, and those who have earned an advanced or professional degree. *Labor force attachment*, also a positive determinant of migration, is an ordinal variable that differentiates those who work part time (fewer than 34 hr per week), full time (35–44 hr per week), and more than full time (45 or more hr per week). *Earnings*, which in past studies was an inconsistent migration determinant (Long, 1988), measures hourly earnings in constant 1982–1984 dollars. *Relative earnings* of each spouse expresses the spouse's earnings as a percentage of their combined earnings and is included as a measure of the relative importance of each spouses' earnings to the family income. *Occupational prestige* is measured using the occupation-specific SEI scores estimated by Hauser and Warren (1997), and an indicator of *professional occupation* is coded 1 if an individual is employed in an occupational category identified as professional or managerial in the census classification.

I included two indicators of underemployment modeled after the Clogg and Sullivan (1983) Labor Utilization Framework. Underemployment has not been widely used in family migration studies, although it may contribute to gender asymmetry by affecting a marriage partner's opportunities to migrate, orientation toward potential moves, and power to influence migration decisions (Morrison & Lichter,

1988). The first underemployment measure is a dichotomous indicator of *underearning* relative to the earnings distribution in one's occupation. Underearning is indicated when an individual's earnings are less than the 20th percentile of the occupation-specific earnings distribution estimated using the IPUMS data. The second underemployment indicator, *overeducated*, identifies spouses who are significantly overeducated relative to the educational attainment of the typical worker in their occupational category. *Overeducated* is coded 1 if the respondent's educational attainment is greater than one standard deviation above the mean of the occupation-specific distribution of educational attainment in the IPUMS data.

To measure occupational characteristics I constructed five occupation-level variables using the 5% samples of the 1980–2000 IPUMS data. Each measure was constructed for each census year by aggregating individual-level data for all employed individuals aged 25–59 to the occupation level using the 263 occupational categories that are consistent across the three decennial censuses and the PSID. Yearly values of each of the five occupational variables were generated through linear interpolation based on the 1980, 1990, and 2000 decennial estimates. The occupation-level measures were matched to each husband and wife in the family-level PSID data by year and spouse-specific occupation.

The first occupational characteristic measured is the *prevalence of migration*, which was intended as an indicator of the demand for migration in an occupation. This variable was operationalized as the percent of workers in each occupation who experienced an interstate migration during the 5 years preceding the census. Second, to measure the localized pressure individuals may feel for employment-related migration I constructed a *geographically relative unemployment* measure. For families residing in metropolitan areas at the start of each yearly observation period (76% of the family-year observations), this variable is defined as the ratio of the occupation-specific unemployment rate in an individual's home metropolitan area relative to the national rate of occupation-specific unemployment. For those families who resided outside of a metropolitan area, the numerator of the geographically relative ratio of unemployment is the occupation-specific unemployment rate in an individual's home state. I also included the national *unemployment rate*

(percent unemployed) in each occupation as a measure of the relative tightness of the occupational labor market. Fourth, I measured the *potential for earnings growth* in each spouse's occupation with the ratio of the 80th to the 20th percentile of the occupation-specific earnings distribution. Finally, I measured the *geographic ubiquity* of an occupation with an index of dissimilarity that measures the degree to which employment in each occupational category is unequally distributed across the United States and ranges between 0 and 1 (see Shauman & Noonan, 2007, for more information about the construction of this measure). For this analysis, *geographic ubiquity* is operationalized using the IPUMS *conspuma* variable, which identifies 542 detailed geographic areas that can be consistently identified across the 1980, 1990, and 2000 censuses. Occupations in which employment is concentrated in relatively few areas have low values on the measure of geographic ubiquity, and occupations that are common in most all areas of the country have geographic ubiquity scores close to 1. Family migration is expected to be negatively influenced by the national occupation-specific *unemployment rate*, but positively associated with the occupational *prevalence of migration*, *potential for earnings growth*, *geographic ubiquity*, and *geographically relative unemployment*.

I also included a set of time-varying family-level control variables that are known to influence family migration. These included an indicator of homeownership, the count of minor children living in the household, and an indicator of childbearing in the year preceding the observation period. To control for the biasing influence that repeat-migration families may have on the analysis, I include an indicator of the prior long-distance migration that is coded 1 if the family experienced a job-related migration between 1976 and the observation year.

I used discrete-time event history models to analyze the determinants of family migration (Sandefur & Tuma, 1987) and to test the hypotheses derived from the structural and relative resource explanations. The logit models estimate the probability of a family migration over 1-year risk periods as a function of the control variables, the individual-level spouse-specific human capital, and employment characteristics, as well as the characteristics of each spouse's occupation. All analyses are weighted and estimated with Stata's SVY commands to

correct for the influences of sampling design and the nonindependence of multiple observations within couples.

RESULTS

Table 1 presents descriptive statistics for *move* and all of the covariates for all families and separately for families that did not move and families that did move. The experience of job-related long-distance migration was a rare event among the families in the analytical sample: Only 1.7% of the family-year observations included a long-distance job-related move. The other family-level measures show that, on average, the families had 1.07 children, childbearing occurred in 8.4% of the family-year observations, 83% of the families lived in a home they owned, and 26.7% of the family-year observations were identified with a prior job-related migration. The families that experienced a move were significantly less likely to be homeowners and they were significantly more likely to have previous migration experience than were the families that did not move.

The measures of individual and occupational characteristics are presented separately for husbands and wives to highlight significant gender differences in human capital, labor force participation, and occupational characteristics. Compared to their wives, men were older, more highly educated, less likely to work part time, and more likely to work more than full time hours. On average, men earned more, had greater occupational prestige, and were more likely to be employed in professional or managerial occupations. Married men were more likely to be overeducated for their occupational placement and less likely to be underearning than were wives, but these gender differences were not statistically significant. The husbands in this sample were employed in occupations that had greater potential for earnings growth but also had higher rates of unemployment, whereas the occupations of the wives were more geographically ubiquitous. There were no significant differences in the prevalence of mobility in the husbands' and wives' occupation, nor were there gender differences in their experience of geographically relative unemployment.

The characteristics of husbands in geographically mobile and immobile families were distinct in many ways. Husbands in migrating families tended to be more highly educated, to work

Table 1. Descriptive Statistics for Independent Variables Measuring Individual, Family, and Occupational Characteristics by Migration Status

| | All Families | | Families That Did Not Move | | Families That Moved | |
|---|-------------------|----------------------|----------------------------|----------------------|---------------------------------|---------------------------------|
| | Husbands | Wives | Husbands | Wives | Husbands | Wives |
| Family characteristics | | | | | | |
| Number of children | 1.071 (0.074) | | 1.067 (0.074) | | 1.310 (0.433) | |
| Had a child in prior year | 0.084 (0.013) | | 0.083 (0.013) | | 0.141 (0.093) | |
| Homeowner (<i>yes</i> = 1) | 0.831 (0.015) | | 0.836 (0.015) | | 0.533 [†] (0.144) | |
| Past experience of family migration (<i>yes</i> = 1) | 0.267 (0.025) | | 0.325 (0.029) | | 0.671 [†] (0.158) | |
| Individual characteristics | | | | | | |
| Age | 41.008 (0.908) | 37.986*** (0.321) | 41.076 (0.923) | 38.008*** (0.325) | 36.586 (2.446) | 35.702** (2.342) |
| Educational attainment | | | | | | |
| High school or less | 0.376 (0.029) | 0.437*** (0.032) | 0.378 (0.029) | 0.438*** (0.032) | 0.179 ^{††} (0.072) | 0.361 (0.155) |
| Some college | 0.235 (0.023) | 0.248 (0.024) | 0.238 (0.023) | 0.246 (0.024) | 0.075 ^{†††} (0.025) | 0.399* (0.141) |
| College degree | 0.245 (0.025) | 0.181** (0.020) | 0.238 (0.025) | 0.181** (0.020) | 0.666 ^{†††} (0.105) | 0.193** (0.090) |
| Advanced or professional degree | 0.141 (0.051) | 0.128 (0.052) | 0.142 (0.052) | 0.130 (0.053) | 0.080 (0.027) | 0.041 (0.016) |
| Labor force attachment | | | | | | |
| Part time (< 34 hr/week) | 0.257 (0.041) | 0.575** (0.039) | 0.357 (0.042) | 0.569** (0.039) | 0.236 (0.118) | 0.851 ^{†††} (0.045) |
| Full time (35–44 hr/week) | 0.510 (0.031) | 0.378 (0.041) | 0.416 (0.031) | 0.384 (0.042) | 0.158 ^{†††} (0.048) | 0.115 ^{†††} (0.035) |
| More than full time (> 45 hr/week) | 0.233 (0.020) | 0.047*** (0.007) | 0.227 (0.020) | 0.047*** (0.007) | 0.606 ^{††} (0.131) | 0.034*** (0.012) |
| Earnings measures | | | | | | |
| Hourly earnings (in constant 1982–1984 dollars) | 9.841 (0.722) | 7.081*** (0.789) | 9.884 (0.734) | 7.125*** (0.803) | 9.882 (1.983) | 6.176 (1.456) |
| Relative earnings (% contribution to combined earnings) | 48.965 (0.995) | 35.291*** (1.149) | 49.100 (0.996) | 35.505*** (1.158) | 52.888 (9.414) | 29.976* (5.812) |
| Occupational prestige | 42.205 (1.773) | 40.536* (1.809) | 42.126 (1.815) | 40.563* (1.846) | 49.704 (4.063) | 42.502** (3.917) |
| Underearning | 0.292 (0.045) | 0.397 (0.029) | 0.293 (0.046) | 0.394 (0.029) | 0.207 (0.120) | 0.621** (0.129) |
| Overeducated | 0.159 (0.051) | 0.141 (0.051) | 0.161 (0.052) | 0.143 (0.052) | 0.078 (0.026) | 0.053 (0.019) |
| Professional occupation | 0.511 (0.035) | 0.460* (0.037) | 0.508 (0.035) | 0.459* (0.038) | 0.786 ^{†††} (0.078) | 0.595 (0.135) |
| Occupational characteristics | | | | | | |
| Prevalence of geographic mobility | 9.861 (0.619) | 9.929 (0.760) | 9.833 (0.634) | 9.951 (0.776) | 11.467 [†] (0.332) | 8.634*** (0.542) |

Table 1. *Continued*

| | All Families | | Families That Did Not Move | | Families That Moved | |
|--------------------------------------|------------------|---------------------|----------------------------|---------------------|---------------------|------------------|
| | Husbands | Wives | Husbands | Wives | Husbands | Wives |
| Geographically relative unemployment | 1.017 (0.061) | 0.999 (0.044) | 1.019 (0.062) | 1.004 (0.044) | 0.803 (0.121) | 0.855 (0.112) |
| Unemployment rate | 3.903 (0.117) | 3.402*** (0.156) | 3.905 (0.119) | 3.397*** (0.159) | 2.932†† (0.363) | 3.240 (0.425) |
| Potential for earnings growth | 2.816 (0.110) | 2.559** (0.078) | 2.819 (0.112) | 2.555** (0.080) | 2.682 (0.119) | 2.696 (0.288) |
| Geographic ubiquity | 0.810 (0.009) | 0.833* (0.018) | 0.810 (0.009) | 0.833 (0.018) | 0.815 (0.020) | 0.852 (0.018) |

Note: Numbers in parentheses are standard deviations. Sample includes 38,890 family-year observations from 5,504 married couples. Descriptive statistics are estimated with Stata's `svy:mean` command to correct for the influences of sampling design and nonindependence of multiple observations within couples.

* $p < .05$; ** $p < .01$; *** $p < .001$ for two-tailed tests of husband-wife differences in means.

† $p < .05$; †† $p < .01$; ††† $p < .001$ for two-tailed tests of mover versus nonmover differences in means.

more than full-time hours, and to be employed in professional occupations and occupations that were characterized by relatively higher levels of migration and lower rates of unemployment. The wives in families that moved were distinguished from those that did not only by their significantly lesser labor force attachment: 85% of wives in mobile families worked part time compared to 56.9% of wives in families that did not experience a move.

Gender Asymmetry in Family Migration

Table 2 presents the estimated coefficients from three hierarchical logit models that test the competing explanations of gender asymmetry in the determinants of family migration. Model 1 tested for gender symmetry in the influence of the marriage partners' human capital and employment characteristics without controlling for gender differences in occupational characteristics.

The estimated coefficients from Model 1 replicated the findings of prior studies by illustrating gender asymmetry in the predictors of family migration events and attesting to the predominance of husbands' characteristics, but not wives', as significant predictors of family migration. Migration was significantly associated with husband's age, educational attainment, labor force attachment, and earnings. In contrast, only the wife's labor force attachment was estimated to significantly influence family migration. According to the estimates in Model 1,

the probability of family migration followed the normative life course pattern of decline (Long, 1988), but only in relation to the husband's age: The probability of a long-distance move declined by 5% for each additional year of age. Family migration also was positively predicted by high educational attainment among husbands and their heavy investment of time in the labor force. Families headed by men with a college degree were 5.79 times as likely as families headed by men with a high school education to be geographically mobile in any yearly period. Compared to families in which the husband worked part time, the odds of a long-distance move were 3.5 times greater for families headed by men who worked more than 45 hours per week. And each dollar increase in a husband's earnings increased the odds of family migration by 2%. In short, the predictors of family migration among dual-earner families—age, education, labor force attachment, and earnings—were the same as those that predict the mobility of unattached men (Long, 1988).

The Model 1 estimates also illustrated the gender asymmetry in the quality of the association between the spouse's characteristics and family migration that is documented by prior studies. Whereas labor force attachment among husbands had a positive influence on the likelihood of family migration, the labor force attachment of wives depressed the likelihood of migration. Full-time employment among wives reduced the odds of family migration by 62%

Table 2. Estimated Coefficients From Logit Models of Long-Distance Family Migration

| Covariate, <i>k</i> | Model 1 | | | Model 2 | | |
|---|-----------|-------------|----------------------|-----------|-------------|----------------------|
| | <i>B</i> | <i>SE</i> | <i>e^B</i> | <i>B</i> | <i>SE</i> | <i>e^B</i> |
| Intercept | -4.559*** | 0.940 | 0.010 | -5.351* | 2.144 | 0.005 |
| Individual characteristics | | | | | | |
| Age | | | | | | |
| Husband | -0.051*** | 0.006 | 0.950 | -0.109*** | 0.030 | 0.897 |
| Wife | 0.029 | 0.036 | 1.029 | 0.090** | 0.032 | 1.094 |
| Educational attainment (excluded = high school or less) | | | | | | |
| Husband, some college | -0.489 | 0.548 | 0.613 | -0.484 | 0.608 | 0.617 |
| Husband, college degree | 1.756* | 0.751 | 5.791 | 1.811** | 0.642 | 6.119 |
| Husband, advanced or professional degree | 1.151 | 0.696 | 3.162 | 1.390* | 0.645 | 4.013 |
| Wife, some college | -0.392 | 0.746 | 0.676 | -0.086 | 0.593 | 0.917 |
| Wife, college degree | -1.554 | 0.937 | 0.211 | -1.679* | 0.753 | 0.187 |
| Wife, advanced or professional degree | -2.104 | 1.295 | 0.122 | -1.642 | 0.847 | 0.194 |
| Labor force attachment (excluded = part time) | | | | | | |
| Husband, full time | -0.113 | 0.366 | 0.893 | 0.047 | 0.313 | 1.048 |
| Husband, more than full time | 1.504** | 0.438 | 4.501 | 1.580*** | 0.405 | 4.856 |
| Wife, full time | -0.977* | 0.389 | 0.377 | -0.904** | 0.307 | 0.405 |
| Wife, more than full time | -0.792 | 0.493 | 0.453 | -0.448 | 0.384 | 0.639 |
| Earnings measures | | | | | | |
| Husband, hourly earnings | 0.021* | 0.011 | 1.021 | 0.023* | 0.011 | 1.023 |
| Wife, hourly earnings | -0.076 | 0.057 | 0.927 | -0.055 | 0.047 | 0.946 |
| Wife earnings as % of combined earnings | 0.007 | 0.009 | 1.007 | 0.008 | 0.008 | 1.008 |
| Occupational prestige | | | | | | |
| Husband | 0.028 | 0.017 | 1.028 | 0.024 | 0.015 | 1.024 |
| Wife | -0.009 | 0.022 | 0.991 | 0.020 | 0.016 | 1.020 |
| Underearning (excluded = not underearning) | | | | | | |
| Husband | -0.086 | 0.563 | 0.918 | -0.313 | 0.387 | 0.731 |
| Wife | 0.417 | 0.428 | 1.517 | 0.572 | 0.328 | 1.772 |
| Overeducated (excluded = not overeducated) | | | | | | |
| Husband | -0.713 | 0.367 | 0.490 | -0.781* | 0.365 | 0.458 |
| Wife | -0.224 | 0.578 | 0.799 | -0.137 | 0.411 | 0.872 |
| Husband | 0.249 | 0.377 | 1.283 | 0.423 | 0.333 | 1.527 |
| Wife | 0.822 | 0.637 | 2.275 | 1.041 | 0.598 | 2.831 |
| Occupational characteristics | | | | | | |
| Husband, prevalence of geographic mobility | | | | 0.053* | 0.025 | 1.054 |
| Husband, geographically relative unemployment | | | | -0.343 | 0.223 | 0.710 |
| Husband, unemployment rate | | | | 0.078 | 0.044 | 1.081 |
| Husband, potential for earnings growth | | | | -0.064 | 0.076 | 0.938 |
| Husband, geographic ubiquity | | | | 0.316 | 1.243 | 1.372 |
| Wife, prevalence of geographic mobility | | | | -0.220*** | 0.063 | 0.803 |
| Wife, geographically relative unemployment | | | | -0.671** | 0.202 | 0.511 |
| Wife, unemployment rate | | | | 0.175 | 0.093 | 1.191 |
| Wife, potential for earnings growth | | | | 0.182 | 0.097 | 1.200 |
| Wife, geographic ubiquity | | | | 0.170* | 0.071 | 1.185 |
| Model χ^2 (<i>df</i>) | | 265.67 (31) | | | 304.24 (41) | |
| Pseudo R^2 | | 0.298 | | | 0.353 | |

Note: Sample includes 38,890 family-year observations from 5,504 married couples. Models estimates are weighted to correct for the influences of sampling design and nonindependence of multiple observations within couple. All models include controls for family-level indicators of the number of children, childbearing during the prior year, homeownership, and prior experience of long-distance job-related migration, as well as missing data indicators for variables measuring children, childbearing, homeownership, educational attainment, and income.

* $p < .05$; ** $p < .01$; *** $p < .001$.

relative to the odds of migration for families with wives who were employed part time. This finding reflected, at the very least, asymmetry in the role migration played in career development for husbands and wives, if not the prioritizing of husbands' career development over that of their wives.

Symmetric Distribution and Symmetric Influence of Occupational Characteristics

Model 2 tested the *symmetric distribution* hypothesis. This hypothesis predicted that the observed gender asymmetry in the individual-level determinants of family migration would be reduced to nonsignificance with the addition of controls for the distribution of occupational characteristics. Contrary to this hypothesis, adding the occupational characteristic measures to the model enhanced spousal asymmetry in the individual-level determinants of family migration. The statistical predominance of husbands' labor force attachment and income was unchanged with the addition of occupational characteristics, and overeducation was revealed as another significant determinant (in the negative direction) of family migration, but only for husbands. Model 2 also retained the asymmetry in the estimated influence of husbands' and wives' labor force participation and revealed new qualitative asymmetries for the estimated effects of age and educational attainment. Both husband's and wife's age were found to be significantly associated with family migration after controlling for their occupational characteristics, but whereas the association was in the normative negative direction for husband's age, wife's age was estimated to be positively associated with family migration. The presence of a highly educated husband (one holding a baccalaureate or postbaccalaureate degree) in a family significantly increased the likelihood of migration, but the presence of a college-educated wife significantly depressed the likelihood of relocation.

Model 2 also tested the *symmetric influence* hypothesis. This hypothesis, which predicted that husbands' and wives' occupational characteristics will have equivalent effects on family migration, was contradicted by significant disparities in the estimated coefficients for spouse-specific occupational characteristics. In general, the model showed that family migration is more closely related to the characteristics of

wives' occupations than to the characteristics of husbands' occupations. Only the prevalence of mobility in a husband's occupation was significantly associated with family migration, whereas the prevalence of mobility, geographically relative unemployment, and the geographic ubiquity of a wife's occupation were all significant determinants of relocation events. And although the prevalence of mobility was an occupational characteristic that significantly predicted family migration for both the husband's and the wife's occupation, the direction of the estimated effect was not symmetric. The odds of experiencing a family migration were increased by 5.4% for every unit increase in the prevalence of mobility in the husband's occupation. In contrast, a wife's employment in a "high mobility" occupation had a significantly negative association with job-related long-distance mobility. According to this result, family migration behavior conformed to an occupational norm of mobility when it was faced by husbands, but the same predictable pattern of family migration was not experienced when it was the wife who was employed in an occupational context characterized by high rates of geographic mobility.

Geographically relative unemployment for wife's occupation was estimated to significantly depress the likelihood of family migration. The direction of this estimate was opposite that expected but consistent with the pattern of gender asymmetry: It indicated that the likelihood of family migration was depressed when the local area unemployment rate for the wife's occupation was high relative to the national rate. A local dearth of occupationally relevant employment opportunities for wives therefore did not seem to prompt job-related family migration. Gender asymmetry was also reflected by the significantly positive coefficient for the geographic ubiquity of the wife's occupation. This estimate indicated that family migration among dual-earner families was more likely when wives were employed in occupations that were well represented across labor markets.

Symmetric Influence of Comparative Advantage

To test the symmetric influence of comparative advantage hypothesis I needed to empirically address the following questions: In the context of family migration decision making, did the influence of an individual-level characteristic depend on the individual having more of that

characteristic than his or her spouse? And if so, was the effect of comparative advantage the same for husbands and wives? To accomplish this, I collapsed each pair of individual-level spouse-specific variables for a given characteristic, k , to the family level, replacing each pair with (a) a single family-level measure of k and (b) a three-category variable that indicated whether the family-level value was really the characteristic of an advantaged husband or wife, or if it reflected a value that can more aptly be considered a measure of the “family” characteristic because it was the average of two very comparable spouse-specific values. I first created a three-level indicator of spousal comparative advantage that distinguished families in which the distribution of the variable was more advantageous for the husband (husband advantage), for the wife (wife advantage), or for neither (i.e., the spouse-specific values are relatively equal). I then created a family-level value of each covariate according to the value of its associated indicator of spousal advantage. If either the husband or the wife had a comparative advantage in the distribution the characteristic, the value of the advantaged spouse was taken as the family value. If the distribution of the characteristic was equal for the spouses, the average of the spouse-specific values was used as the family-level value.

The definition of spousal equality and comparative advantage differs somewhat across the covariates. For *age*, equality was defined as a difference of no more than 2 years, and spouse-specific advantage was indicated by an advantage of 3 or more years. Husbands and wives who had the same level of *educational attainment*, a four-category ordinal variable, were considered equal, whereas a difference of at least one level is coded as a spouse-specific advantage. Because the distribution of relative advantage may differ by level of educational attainment, I defined the spousal advantage indicators as specific to the level of educational attainment of the advantaged spouse. The same level-specific scheme was used for *labor force attachment*: Spousal equality was indicated by equality on the ordinal scale, and advantage was indicated for the spouse with the greater value of the ordinal variable. For the dichotomous indicators of underemployment and professional/management employment, equality was indicated if both spouses shared either the presence or absence of the characteristic. Because the underemployment variables, *underearning* and *overeducated*,

are negative characteristics, spousal advantage occurred when only one spouse lacked the characteristic (e.g., the husband was not under-earning but his wife was). For professional or managerial employment, spousal advantage occurred when only one spouse was employed in a professional/managerial occupation. For all other variables—*earnings*, *occupational prestige*, and all of the occupational characteristics—I generated zero-centered husband-minus-wife difference variables. Values within half of a standard deviation of the mean (zero) on these centered difference variables were coded as reflecting spousal equity. Values that are greater than half of a standard deviation above the mean indicated husband advantage and values less than half of a standard deviation below the mean indicated wife advantage. I note that the proportionate contribution of each spouse to family income was dropped from this part of analysis because it was highly collinear with the comparative advantage measure for *earnings*.

Table 3 presents descriptive statistics for the data transformed to the family-level and the proportionate distribution of husband and wife advantage for each of the covariates. Families were much more likely to be characterized by husband advantage on the covariates included in this analysis than by a wife advantage. Families tended to be characterized by a husband advantage in age (42% of families), educational attainment (27%), labor force attachment (41%), earnings (44%), or occupational prestige (40%). The occurrence of wife advantage in the distribution of the individual-level characteristics was much less common. For example, only 16% of all wives had attained more education and 14% had greater labor force participation than their husbands. The distribution of comparative advantage was more balanced for the occupational characteristics: There were significant differences in the prevalence of husband and wife advantage for only two of the occupational measures. A greater proportion of families were characterized by a husband advantage in the potential for earnings growth, whereas wife advantage (44% of families) was more likely than was husband advantage (28%) in the distribution of occupational geographic ubiquity.

Using the transformed data, I estimated two models. The first included only the family-level values of the k covariates and therefore assumed that the effect of each covariate was consistent regardless of whether it reflected

Table 3. Proportion of Families Characterized by a Husband Advantage or Wife Advantage in the Distribution of Each Covariate and Descriptive Statistics for Variables Collapsed to the Family Level

| Covariate, <i>k</i> | Proportion of Families Characterized by | | | All Families | |
|--------------------------------------|---|-------------------|----------------|--------------|-------|
| | Spousal Equity | Husband Advantage | Wife Advantage | Mean | SD |
| Individual characteristics | | | | | |
| Age | 0.530 | 0.419 | 0.051*** | 41.129 | 0.899 |
| Educational attainment | 0.571 | 0.268 | 0.161*** | | |
| High school or less | 0.295 | | | 0.295 | 0.024 |
| Some college | 0.099 | 0.090 | 0.060** | 0.247 | 0.022 |
| College degree | 0.092 | 0.122 | 0.059** | 0.271 | 0.026 |
| Advanced or professional degree | 0.086 | 0.056 | 0.043 | 0.183 | 0.049 |
| Labor force attachment | 0.447 | 0.411 | 0.143*** | | |
| Part time | 0.239 | | | 0.239 | 0.019 |
| Full time | 0.190 | 0.197 | 0.114 | 0.500 | 0.034 |
| More than full time | 0.018 | 0.214 | 0.029*** | 0.260 | 0.022 |
| Earnings measures | | | | | |
| Hourly earnings | 0.420 | 0.443 | 0.137*** | 10.712 | 0.632 |
| Occupational prestige | 0.273 | 0.403 | 0.324* | 47.126 | 1.450 |
| Underearning | 0.534 | 0.286 | 0.180 | 0.576 | 0.031 |
| Overeducated | 0.870 | 0.056 | 0.074 | 0.215 | 0.048 |
| Professional occupation | 0.662 | 0.194 | 0.144* | 0.655 | 0.026 |
| Occupational characteristics | | | | | |
| Prevalence of geographic mobility | 0.245 | 0.352 | 0.403 | 11.409 | 0.670 |
| Geographically relative unemployment | 0.393 | 0.313 | 0.294 | 1.328 | 0.092 |
| Unemployment rate | 0.372 | 0.366 | 0.262 | 4.652 | 0.149 |
| Potential for earnings growth | 0.507 | 0.279 | 0.215* | 3.056 | 0.117 |
| Geographic ubiquity | 0.282 | 0.282 | 0.437* | 0.868 | 0.011 |

Note: Sample includes 38,890 family-year observations from 5,504 married couples. Means and standard deviations are weighted and estimated with Stata's svy:mean command to correct for the influences of sampling design and nonindependence of multiple observations within couple.

* $p < .05$; ** $p < .01$; *** $p < .001$ for two-tailed tests of husband-wife differences in proportions.

the characteristics of an advantaged husband, an advantaged wife, or the mean value for an equitable couple. The second was a comparative advantage model that added the interaction between each family-level covariate and its associated comparative advantage indicator. For each of the interactions, the equal-spouses category was the contrast (excluded) category and the $k \times$ Husband advantage and $k \times$ Wife advantage interaction terms were included. This specification tested the symmetric comparative advantage hypothesis by providing separate estimates of the association between family migration and a covariate, k , when a comparative advantage in the distribution of k was held by the husband and when it is held by the wife. A significant interaction term indicated the conditioning effect of comparative advantage. Gender symmetry in the conditioning influence

of comparative advantage was indicated if the husband and wife advantage interaction terms were comparable in significance, direction, and magnitude.

This model specification provided a conservative test of symmetry in the influence of interspousal comparative advantage. Collapsing the individual-level measures to the family level truncated the range and reduced the variance of the variable distributions and thereby reduced the likelihood of significant associations with migration. Also, for many variables, the small proportion of families characterized by a wife advantage meant that statistical significance would be obtained only if the gender asymmetry in the effect of the comparative advantage was relatively great.

Table 4 presents the estimated coefficients for the family-level and comparative advantage

Table 4. Estimated Coefficients From Family-Level Logit Models of Family Migration

| | Comparative Advantage Model | | | | | | | | | | | |
|--|-----------------------------|-----------|-------|--------------------------------|-----------|-------|----------------------------------|-----------|-------------------------|-------------------------------|-----------|-------------------------|
| | Family-Level Model | | | Spousal Equality (Main Effect) | | | $k \times$ Husband Has Advantage | | | $k \times$ Wife Has Advantage | | |
| | <i>B</i> | <i>SE</i> | e^B | <i>B</i> | <i>SE</i> | e^B | <i>B</i> | <i>SE</i> | $e^{B(Main\ Effect)+B}$ | <i>B</i> | <i>SE</i> | $e^{B(Main\ Effect)+B}$ |
| Covariate, <i>k</i> | | | | | | | | | | | | |
| Intercept | -4.320 | 3.907 | 0.013 | -1.194 | 2.159 | 0.303 | | | | | | |
| Individual characteristics | | | | | | | | | | | | |
| Age | -0.044** | 0.011 | 0.957 | 0.006 | 0.016 | 1.006 | -0.030*** | 0.007 | 0.976 | -0.020 | 0.012 | 0.986 |
| Educational Attainment (excluded = high school or less) | | | | | | | | | | | | |
| Some college | 0.746 | 0.519 | 2.109 | 0.641 | 0.382 | 1.898 | 0.115 | 0.366 | 2.128 | 1.158 | 0.681 | 6.041 |
| College degree | 2.121** | 0.674 | 8.341 | 1.398* | 0.542 | 4.047 | 1.459** | 0.419 | 17.407 | -1.414* | 0.550 | 0.984 |
| Advanced or professional degree | 0.999 | 0.576 | 2.717 | 1.329* | 0.604 | 3.776 | 0.516 | 0.609 | 6.325 | 0.292 | 0.698 | 5.056 |
| Labor force attachment (excluded = part time) | | | | | | | | | | | | |
| Full time | -0.405 | 0.327 | 0.667 | -0.930* | 0.430 | 0.395 | 0.826* | 0.381 | 0.901 | 0.718 | 0.497 | 0.809 |
| More than full time | 1.524** | 0.454 | 4.589 | 0.823* | 0.402 | 2.278 | 0.631 | 0.402 | 4.282 | -0.759 | 0.527 | 1.066 |
| Earnings measures | | | | | | | | | | | | |
| Hourly earnings | 0.008 | 0.016 | 1.008 | -0.116* | 0.054 | 0.891 | 0.087* | 0.042 | 0.972 | 0.037 | 0.050 | 0.924 |
| Occupational prestige | -0.134 | 0.680 | 0.874 | 0.004 | 0.018 | 1.004 | -0.002 | 0.008 | 1.002 | -0.006 | 0.008 | 0.998 |
| Underearning | 0.602 | 0.644 | 1.826 | 0.336 | 0.418 | 1.400 | 0.187 | 0.248 | 1.688 | -1.224** | 0.469 | 0.412 |
| Overeducated | -0.643 | 0.370 | 0.526 | -0.373 | 0.511 | 0.688 | -0.692 | 0.424 | 0.345 | -1.084* | 0.434 | 0.233 |
| Professional occupation | 0.020 | 0.023 | 1.020 | 1.219 | 0.687 | 3.384 | -1.207** | 0.451 | 1.012 | -0.951* | 0.415 | 1.307 |
| Occupational characteristics | | | | | | | | | | | | |
| Prevalence of geographic mobility | 0.025 | 0.027 | 1.026 | 0.150* | 0.075 | 1.161 | 0.086* | 0.043 | 1.266 | -0.023 | 0.047 | 1.134 |
| Geographically relative unemployment | -0.615* | 0.258 | 0.541 | -0.882* | 0.402 | 0.414 | 0.253 | 0.360 | 0.533 | 0.197 | 0.319 | 0.504 |
| Unemployment rate | 0.022 | 0.059 | 1.022 | 0.176 | 0.107 | 1.192 | -0.081 | 0.073 | 1.099 | -0.150 | 0.088 | 1.026 |
| Potential for earnings growth | -0.062 | 0.065 | 0.940 | -0.040 | 0.086 | 0.961 | -0.023 | 0.080 | 0.939 | 0.189 | 0.097 | 1.161 |
| Geographic ubiquity | -1.217 | 3.602 | 0.296 | -1.098 | 1.098 | 0.334 | 1.272 | 1.406 | 1.190 | 1.176** | 0.396 | 1.082 |
| Model χ^2 (<i>df</i>) | 227.28 (24) | | | | | | | | | | | |
| Pseudo R^2 | 0.239 | | | | | | | | | | | |
| 344.59 (56) | | | | | | | | | | | | |
| 0.398 | | | | | | | | | | | | |

Note: Sample includes 38,890 family-year observations from 5,504 married couples. Model are weighted and estimated with Stata's `svy:logit` command to correct for the influences of sampling design and nonindependence of multiple observations within couple. All models include controls for family-level indicators of the number of children, childbearing during the prior year, homeownership, and prior experience of long-distance job-related migration, as well as missing data indicators for variables measuring children, childbearing, homeownership, educational attainment, and income. The columns labeled $e^{B(Main\ Effect)+B}$ present the odds ratios for the interaction coefficient combined with the main effect, that is, these are the estimated effects for families characterized by a spousal comparative advantage.

* $p < .05$; ** $p < .01$; *** $p < .001$.

models of family migration. The columns labeled “Family-Level Model” present the estimates for that model. These coefficients verified the influence of the age, high educational attainment, and labor force attachment of a “household head” as well as the prevalence of migration and geographic ubiquity of his or her occupation as predictors of family migration.

In Table 4, the columns labeled “Spousal Equality (Main Effects)” present the estimated effects from the comparative advantage model for families in which the marriage partners had equal values of each covariate. The coefficients in the columns labeled “ $k \times$ Husband Has Advantage” and “ $k \times$ Wife Has Advantage” describe how the estimated influence of a covariate differed from the spousal-equality effect for families in which one partner had a comparative advantage.

The significance of the interaction terms in this model reflected the conditioning effect of interspousal comparative advantage predicted by relative resource theory. Contrary to the symmetric comparative advantage hypothesis, however, the husband and wife advantage interactions were very different in magnitude, sign, and/or statistical significance. A husband advantage significantly affected the estimated influence of age, labor force attachment, educational attainment, earnings, and the occupational prevalence of geographic mobility. In contrast, a wife advantage significantly conditioned the estimated influence of the educational attainment, the underemployment indicators, and occupational geographic ubiquity. Only the estimated interactions for professional/managerial employment were consistent with the gender symmetry hypothesis: The husband and wife advantage interaction terms were both negative and comparable in magnitude.

The model estimates revealed qualitative gender differences in the comparative-advantage conditioning effect. The significant husband advantage interaction terms were almost all positive, whereas those for wife advantage were almost uniformly negative, indicating that husband advantage generally increased the likelihood of family migration, but a wife advantage tended to depress it. The estimated coefficients for educational attainment illustrate this gender asymmetry. Attainment of a college degree increased the odds of migration, and this positive association was amplified when the husband held a college degree but the wife did not. In contrast,

the significant negative interaction between college degree and wife advantage indicated that the positive influence of postsecondary educational attainment was depressed when it was the wife who was the more highly educated of the spouses. Wife advantage in underemployment also depressed the likelihood of family migration. Recalling that the comparative advantage for these variables represented the *absence* of the characteristic, wife advantage on *underearning* or *overeducated* identified families in which the wife was *not* underemployed but her husband was. The significantly negative wife advantage interactions for these variables indicated that the odds of migration were quite low for families in which the wife was not underemployed but her husband was.

Gender asymmetry in the influence of comparative advantage extended to some occupational characteristics. When the prevalence of geographic mobility was about equal in husbands’ and wives’ occupations, this occupational characteristic was associated with higher rates of family migration. The positive influence of this occupational characteristic grew significantly when the prevalence of mobility was relatively greater in the husbands’ occupations, but the same conditioning effect was not found when the comparative advantage was experienced by wives. The positive influence of occupational geographic ubiquity, however, was experienced only in families characterized by a wife advantage on this occupational characteristic. These results indicate that dual-earner families were responsive to the occupational demand for migration when it was associated with the husband’s employment, but that the influential characteristic associated with wives’ jobs was their geographic ubiquity because it facilitated family migration motivated by their husbands’ careers.

DISCUSSION

The analysis presented in this paper tested longstanding but rarely examined explanations of gender asymmetry in the determinants of family migration. The results contradict each of the gender symmetry hypotheses implied by the microeconomic and relative resource theories. Counter to the symmetric distribution hypothesis and the structural explanation, gender differences in the distribution of occupational characteristics did not explain the predominance of husbands’

characteristics as significant predictors of family migration. Counter to the symmetric influence hypothesis, the influence of occupational characteristics differed significantly for husbands and wives. And, although the results confirmed that an interspousal comparative advantage in the distribution of a characteristic does condition, or trigger, its influence on migration events, the results are not consistent with the symmetric influence of comparative advantage hypothesis because the conditioning effect of comparative advantage differed significantly for husbands and wives.

Although the results of this analysis are inconsistent with the structural explanation, they provide some insight about the influence of occupational characteristics on family migration. The characteristics of husbands' occupations are largely inconsequential as determinants of family migration. The results show that migration is directly related to the individual-level human capital characteristics of men, regardless of their occupational placement. Although the occupational characteristics of wives are comparatively more influential, the salient characteristics of wives' occupations are those that appear to facilitate their status as the tied migrant in dual-earner families. These results are preliminary, however, given that the data used for this analysis are inadequate to capture many consequential aspects of structural inequality in the labor market, and they highlight the need for more reliable measures of theoretically relevant occupational characteristics.

Interpreted together, the results of the individual- and family-level models inform the relative resource theory by illustrating both the conditioning influence of interspousal comparative advantage and the gender asymmetry with which it operates in family decision making. The results of this analysis are largely consistent with the relative resource theory prediction that the predominance of husbands' characteristics as predictors of family migration is attributable to the fact that husbands are more likely to enjoy a comparative advantage over their wives in the distribution of key human capital, labor market, and occupational characteristics. Estimates from the complete individual-level model (Model 2 in Table 2) confirmed that husbands' characteristics are the more salient predictors of family migration; the model specifically identified a husband's age, attainment of a college education, intense labor force participation, earnings,

overeducation, and occupational prevalence of migration as significant determinants. The comparative advantage model identified many of these same characteristics—age, college education, hourly earnings, and the prevalence of geographic mobility—as those for which the significant association with migration was conditioned by a husband advantage in the within-family distribution. The importance of interspousal comparative advantage as a mechanism through which the individual-level characteristics affect family decision making was also illustrated by two characteristics of wives: Wives' college degree attainment and occupational geographic ubiquity were significant predictors of family migration in the individual-level model *and* these characteristics were ones for which wife advantage had a significant conditioning effect in the family-level model.

Yet, counter to the relative resource theory, the family-level analysis also revealed that the triggering effect of comparative advantage operates in qualitatively different ways for husbands and wives. First, the conditioning influence of husband advantage and wife advantage operated for gender-specific sets of characteristics. Second, whereas a husband advantage generally amplified the likelihood of family migration, a wife advantage in the interspousal distribution of a characteristic had an almost uniformly negative influence on family migration. The results of this analysis thus affirm that comparative advantage is a mechanism by which within-family gender inequality is generated, a central tenet of relative resource theory, but the results also reflect the indirect influences of labor market inequality and gender ideology. The predominance of husband advantage in the distribution of key human capital and occupational characteristics—the pattern of interspousal relative resource distribution that this research has identified as a determinant of gender asymmetry in family migration decisions—is a product of the prevailing labor market inequality and gender ideology. Structural inequality in the labor market and gendered expectations for family roles and responsibilities give husbands the comparative advantage in characteristics such as educational attainment, labor force attachment, and earnings that they parlay into ascendance in family migration decisions. To understand the causes of gender asymmetry in family decision making, therefore, future research must identify the mechanisms through which structural

inequality and gender ideology generate husband advantage and how that advantage operates in family processes.

Finally, although the failure to explain gender asymmetry in this study can be interpreted as support for the conventional gendered family role explanation—that males are unlikely to accommodate moves motivated by their wives' careers and wives have little power to resist moves motivated by their husbands' careers—as a whole, the results of this analysis suggest a more nuanced interpretation of the influence of gender on family migration decisions. Specifically, both the individual- and family-level models of family migration indicated that wives' human capital characteristics often operate to depress the likelihood of migration. I found this effect for wives' educational attainment, labor force participation, and comparative advantage in underemployment. These results indicate that wives might use their human capital to resist family moves. Given the negative consequences of tied migration for the employment outcomes of women (Boyle et al., 2009; Shauman & Noonan, 2007), it is rational for them to do so. According to this analysis, it is women with the greater stocks of human capital and labor force commitment, and who therefore would face the greatest costs as tied migrants, who exert the greatest resistance to family moves. Additionally, the positive influence of the wives' occupational geographic ubiquity might indicate that wives' consent to tied migration when their jobs can be easily replaced and the disruptive effects to their careers minimized. So, although this analysis confirms the persistence of gender differences in the ability to motivate family moves, the results indicate that wives are active participants in family migration decisions.

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