Sex Asymmetry in Family Migration: Familial Gender Roles or Occupational Inequality?

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Research Statement

Despite significant increases in women's labor force attachment, occupational prestige and proportionate contribution to family income, the empirical evidence indicates that long-distance family migration continues to be motivated disproportionately by the employment dynamics of the male partner in married-couple families. Researchers attribute this sex asymmetry to one of two influences: (1) individual-level human capital disparities between spouses or (2) familial gender role inequality. These explanations focus on inequality by sex at the individual-level or within the family and ignore the potential influence of *structural* sex inequality within the labor market. In this paper I test the competing influences of individual-, family-and structural-level characteristics on sex asymmetry in family migration by incorporating measures of relevant occupational characteristics that have been neglected by prior research. The analysis uses individual- and family-level data from the *Panel Study of Income Dynamics* (PSID), occupation-level data from the 1970-1990 U.S. Decennial Censuses Integrated Public Use Micro Samples (IPUMS), and discrete-time event history models to estimate the influence of individual-, family- and occupational-level characteristics on family migration events.

Theoretical Framework

Mincer's (1978) formulation of a microeconomic migration model is the dominant model of family migration and its consequences. The central premise of this model is that families move when the benefits to the family from doing so outweigh the costs, i.e. when relocation would maximize family well-being. When making migration decisions, individual family members are assumed to subjugate their own rational interests to the interests of the family as a whole, and in so doing they may forgo opportunities that would benefit them personally (Bielby and Bielby 1992). Mincer introduced the concept of a "tied" partner to characterize the marital spouse whose "'private' calculus" contradicts the family migration decision (Mincer 1978:751).

Mincer's neoclassical model of family migration is formally symmetrical in its treatment of men and women: decisions about family migration are conceptualized as the result of a rational analysis of the joint utility of migration based on the characteristics of each marital partner and without regard to sex. The assumption of sex symmetry of the neoclassical model leads to the hypothesis that women with earnings capacity equal to those of their husbands will command a fully competitive role in migration decisions related to career advancement (Duncan and Perrucci 1976). This hypothesis and the assumption of sex symmetry within the family are inconsistent with a considerable amount of research that finds 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 behavior (Duncan and Perrucci 1976; Lichter 1980; Lichter 1982; Lichter 1983; Long 1974; Shihadeh 1991).

Gender roles and family migration

To explain this sex asymmetry, sociologists have focused on how the influence individual-level characteristics have on migration decision-making is conditioned by gender role ideology (Hood 1983). Within households, men and women hold different family roles and their orientation to those roles are influenced by their gender-role identification. Gender-role beliefs structure mutual expectations about responsibilities within the family and thereby have a profound effect on both the family decision-making process and its outcomes (Hochschild 1989; Hood 1983). Because of gender-role beliefs, roles within the family are not exchangeable and family members are not perfectly adaptable to migration costs and opportunities as is implied by the assumption of sex symmetry that underlies the neoclassical microeconomic model (Bielby and Bielby 1992; Halfacree 1995). In the context of family migration decisions, "gender-role ideology introduces asymmetry into the process by which husbands and wives decide how to respond to a job opportunity in a different location" (Bielby and Bielby 1992:1245).

Structural inequality and family migration

The sociological focus on gender asymmetry within the family provides many insights to our understanding of sex inequality in family migration decisions. However, the within-family focus has diverted attention from any empirical examination of the potential influence of structural inequality in the broader social context, and namely of the influence that sex inequality in the labor market may have on inequality within the family.

Although the formal properties of the neoclassical model are gender neutral, Mincer (1978) recognized that, in practice, the context of sex inequality in the labor force and the related sex gap in earnings power would lead to asymmetric influence and implications for men and women. First, women are less likely to initiate moves since their gains from remote career opportunities are unlikely to exceed their husbands' losses from migration. Tied stayers are therefore disproportionately female. Second, women are less likely to resist moves since their net loss of earnings is likely to be offset by the potential income gains associated with remote opportunities for their husbands. Women are therefore more likely than men to be tied movers (Bielby and Bielby 1992).

Due to the high degree of persistent occupational sex segregation (Bianchi 1995; Bielby and Baron 1986), women and men in the U.S. tend to work in separate occupations that have distinct structural characteristics. "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 tend to pay lower average wages, to be lower in prestige and to offer less occupational autonomy and authority than do male-dominated occupations (Spain and Bianchi 1996). Regarding family migration, the structural characteristics of female-dominated jobs means that, on average, women will be faced with fewer remote employment opportunities than men. The remote opportunities that do arise for women are likely to be associated with lesser net benefits than the opportunities offered to men. Furthermore, because of the ubiquity of 'women's' jobs, replacing lost employment is less likely to require relocation for women than for men. In short, the sex inequality in the labor force as well as in the family "serves to attenuate the link between geographic and social mobility, which in turn perpetuates existing sex inequalities" (Morrison and Lichter 1988:171).

Significance of the research

Since prior research has neglected to account for the potential influence of the gendered structure of the labor market when estimating the determinants of family migration behavior, the literature so far lacks a definitive test of the competing explanations of sex asymmetry in family migration decisions. The failure to control for the characteristics of the labor markets in which each marital partner is involve may have generated overestimates of the causal effects of gender role beliefs on family migration decisions. This is because assertions about the influence of gender roles and gender-role ideology on the causes and consequences of family migration are largely based on studies that only indirectly test hypotheses derived from the genderrole theory (Bielby and Bielby 1992 is a notable exception). In general, the influence of gender role beliefs is imputed from significant residual sex differences in the estimated effects of individual-level human capital characteristics in multivariate models of family migration events that include controls for demographic characteristics. The reasoning behind this interpretation is that any inequality by sex in the ability to affect family migration decisions that is not explained by sex differences in the distribution of individual-level characteristics must be attributable to the sex asymmetry introduced by gender-role ideology in familial power and in the value placed on each spouse's career advancement (Bielby and Bielby 1992). This approach tends to overestimate the effects of gender-roles, however, because past multivariate analyses have not included all relevant explanatory variables. More specifically, since prior studies contain no controls for occupational category or the structural characteristics of the occupational labor markets of the marriage partners, the residual sex difference reflects not only the effect of gender inequality within the household, but the effects of stratification and segregation by sex in the labor force as well.

This research adds to the literature in two ways. First, it provides a direct test of the structural explanation of sex asymmetry in family migration. Second, by incorporating measures of theoretically relevant occupational characteristics into individual- and family-level models of family migration, this analysis

provides more rigorous tests of both the human capital and gender role explanations of sex asymmetry in family migration decisions than has been accomplished heretofore.

Hypotheses

The analysis presented in this paper focuses on testing three specific hypotheses that are derived from the microeconomic theory of family migration and are informed by the literatures on the labor market determinants of migration and occupational sex segregation. First, the symmetric distribution hypothesis posits that the observed spousal asymmetry in the influence of individual-level determinants of family migration is an artifact of the spousal differences in occupational characteristics that is generated by occupational sex segregation. Empirically, this hypothesis is supported if controls for the uneven distribution of occupational characteristics explain the observed sex asymmetry in the individual-level determinants of family migration. Second, the symmetric influence hypothesis posits that although the distribution of occupational characteristics is uneven, the influence of these characteristics on family migration behavior will be the same for husbands and wives. This hypothesis is supported if the influences of occupational characteristics on family migration do not interact with sex. Third, the symmetric comparative advantage hypothesis posits that inter-spousal disparities in occupational characteristics may condition the effect individual-level characteristics have on family migration behavior, but that the influence of the disparity will not depend on the sex of the spouse with the comparative advantaged. For example, marginal differences in the occupational demand for migration may generate differences in the individual-level influence of that occupational characteristic, but in the absence of conditioning gender roles, the conditioning effect of the inter-spousal advantage will accrue equally to husbands and wives.

Research design

This analysis is based on family-level data from the *Panel Study of Income Dynamics* (PSID) and occupation-level data from the U.S. Decennial Censuses 5% Public Use Micro Sample (PUMS). The family-level data come from 5,242¹ families that were headed by couples who remained married (to each other) in at least two consecutive yearly waves of the PSID between 1981 and 1993.

Long distance family migration is the dependent variable for the analysis. It is measured at one-year intervals by combining self-reports of migration during the year prior to the survey date with the year-specific geographic identifiers for the residential location of each household. Long-distance migration is defined as moves across the boundaries of metropolitan areas.²

Independent variables measured at the individual-level include commonly used spouse-specific measures of demographic characteristics, individual human capital investments, labor force participation, and income. I also use the Labor Utilization Framework of Clogg and Sullivan (1983) to develop measures of the degree to which husbands and wives in married-couple families are underemployed prior to the time period when they are at risk of migrating. Since being underemployed may affect a marriage partner's orientation to a potential move and his/her power to influence the decision, underemployment is an important control that has been largely overlooked in previous research on family migration.³

¹ Other criteria for selection of the analytical sample include (1) no missing data for key variables (marital status, sex, migration status, occupation), (2) employment at the start of each observation period, and (3) the absence of the following characteristics for both members of the couple: being a member of the armed forces, retired, permanently disabled, on public assistance, or in prison or jail at either the start or end of an observation period.

² More specifically, long-distance migration is coded as either moves between metropolitan areas, moves between metropolitan and non-metropolitan areas, or county-to-county moves for those who did not live in a metropolitan area in either of the adjacent years in each year-to-year comparision.

³ Morrison and Lichter (1988) examine the likelihood of underemployment among women as an outcome of family migration, but their analysis does not assess the extent to which underemployment influences the probability that a family migrates.

The family-level data includes measures of family composition (presence and ages of children), wife's proportionate contribution to the family income, and indicator of homeownership status and spousal differences in key determinants of migration such as age and educational attainment.

Occupational characteristics are measured using data from the 1970, 1980 and 1990 IPUMS (Ruggles, Sobek, Alexander, Fitch, Goeken, Hall, King, and Ronnander 2004). The Census data provide measures of five occupational labor market characteristics that may generate sex asymmetry in family migration decisions. The first is a measure of the prevalence of migration in each occupation that is operationalized as the proportion of workers who experienced an inter-state migration during the 5 years preceding the census. Second, a geographically relative measure of unemployment is used to measure the pressure for employment-related migration. This measure is defined as the ratio of the occupation-specific unemployment rate in an individual's home metropolitan area (or county for those residing in rural areas) relative to the national rate of occupation-specific unemployment. Third, I use the ratio of the 80th to the 20th percentile of the earnings distribution as a measure of the potential for earnings growth in an occupation. Fourth, the relative tightness of the occupational labor market is measured by the unemployment rate in each occupation. Finally, I generate a measure of the geographic ubiquity of an occupation. This variable is defined as an index of dissimilarity: it measures the degree to which employment in each occupational category is unequally distributed across metropolitan areas of the U.S and ranges between 0 and 1 (Shauman and Noonan 2005). Occupations in which employment is concentrated in relatively few labor markets will have low values on the measure of geographic ubiquity, and occupations that are prevalent in most all areas of the country will have high geographic ubiquity scores. Year-specific measures of each of the four labor force characteristics for each occupation are generated through linear interpolation based on the three decennial estimates (1970, 1980 and 1990). These measures of occupational characteristics are linked to the PSID data by year and the occupation in which each husband and wife in the analytical sample reports being employed at the start of each yearly interval.

Following the recommendations of Sandefur and Tuma (1987) I use discrete-time event history models to analyze sex differences in the determinants of family migration. The dependent variable for the analysis is the probability of family migration during a given year. Individual-, family- and occupation-level covariates are measured prior to the year in which the married-couple families are at risk of experiencing a move.

Preliminary results

In preliminary analyses I have examined the symmetric distribution and influence hypotheses. The results provide only limited support for these hypotheses. Controlling for sex differences in occupational characteristics appears to reduce (but does not completely explain) the estimated sex differences in the influence of individual-level human capital variables on the probability of family migration. However, contrary to the symmetric influence hypothesis, the influence of occupational characteristics on family migration varies significantly by sex. For example, in preliminary models that include all covariates, the geographic ubiquity of the wife's occupation has a positive influence on the probability of family migration, but this characteristic of the husband's occupation has no influence. It seems that the geographic ubiquity of female-dominated jobs may facilitate family migration and contribute to wives' disproportionate experience of tied migration. Thus, the preliminary results so far indicate some support for the structural explanation of sex asymmetry in family migration events, but the bulk of the findings are consistent with the gender-role explanation.

population in area i, T is the total population, p_i is the proportion of area i employed in occupation j, and P is the proportion of the total population in occupation j.

⁴ 1970, 1980 and 1990 Census data were extracted from the IPUMS using the following samples: 1970 Form 1 Metro, 1990 5% State, 1980 5% State (A Sample).

⁵ The occupation-specific measure of geographic ubiquity, G, is defined as $1 - \frac{\sum_{i=1}^{n} (t_i | p_i - P|)}{2TP(1-P)}$, where t_i is the total

References

- Bianchi, Suzanne M. 1995. "Changing Economic Roles of Women and Men." in *State of the Union: America in the 1990s, Volume One: Economic Trends*, edited by R. Farley. New York: Russell Sage Foundation.
- Bielby, William T. and James N. Baron. 1986. "Men and Women at Work: Sex Segregation and Statistical Discrimination." *American Journal of Sociology* 91:759-799.
- 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* 97:1241-1267.
- Clogg, Clifford C. and Teresa A. Sullivan. 1983. "Labor Force Composition and Underemployment." *Social Indicators Research* 12:117-152.
- Duncan, R. Paul and Carolyn Cummings Perrucci. 1976. "Dual Occupation Families and Migration." *American Sociological Review* 41:252-261.
- Halfacree, Keith H. 1995. "Household Migration and the Structuration of Patriarchy: Evidence from the USA." *Progress in Human Geography* 19:159-182.
- Hochschild, Arlie R. 1989. The Second Shift. New York: Avon Books.
- Hood, Jane C. 1983. Becoming a Two-Job Family. New York: Praeger.
- Lichter, Daniel T. 1980. "Household Migration and the Labor Market Position of Married Women." *Social Science Research* 9:83-97.
- —. 1982. "The Migration of Dual-Worker Families: Does the Wife's Job Matter." *Social Science Quarterly* 63:48-57.
- —. 1983. "Socioeconomic Returns to Migration among Married Women." Social Forces 62:487-503.
- Long, Larry H. 1974. "Women's Labor Force Participation and the Residential Mobility of Families." *Social Forces* 52:342-348.
- Mincer, Jacob. 1978. "Family Migration Decisions." Journal of Political Economy 86:749-773.
- Morrison, Donna R. and Daniel T. Lichter. 1988. "Family Migration and Female Employment: The Problem of Underemployment among Migrant Married Women." *Journal of Marriage and the Family* 50:161-172.
- Ruggles, Steven, Matthew Sobek, Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander. 2004. *Integrated Public Use Microdata Series: Version 3.0 [Machine-readable database]*. Minneapolis, MN: Minnesota Population Center [producer and distributor].
- Sandefur, Gary D. and Nancy B. Tuma. 1987. "How Data Type Affects Conclusions about Individual Mobility." *Social Science Research* 16:301-328.
- Shauman, Kimberlee A. and Mary C. Noonan. 2005. "Family Migration and Labor Force Outcomes: Sex Differences in Occupational Context." Presented at the Annual Meeting of the Population Association of America. Philadelphia, PA.
- Shihadeh, Edward S. 1991. "The Prevalence of Husband-Centered Migration: Employment Consequences for Married Mothers." *Journal of Marriage and the Family* 53:432-444.
- Spain, Daphne and Suzanne M. Bianchi. 1996. *Balancing Act: Motherhood, Marriage, and Employment Among American Women*. New York: Russell Sage Foundation.