GENDER ROLES, THE DIVISION OF HOUSEHOLD LABOR, AND MIGRATION RISK

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INTRODUCTION

As a reaction against the singular focus on economically motivated male migrants within migration research, critics began to call for the incorporation of women and gender in the 1970s and 1980s (Houstoun, Kramer, and Barrett 1984; Seller 1975). Following this, gender mainstreaming in the field mushroomed, yielding migration research from both micro and macro perspectives that de-centered the initial emphasis placed on men (Pedraza 1991). As a result of the work generated over the past 30 years, migration is now recognized as a social process that is in part shaped by the asymmetries that exist within gender relations. Despite this progress, much remains unknown or untested about the mechanisms through which gender may influence the migration-decision process.

This paper argues that the performance of traditional gender roles, which creates a gendered division of labor within the public and private spheres, influences gender disproportion in the likelihood of individual migration. Since traditional gender roles reinforce the feminine-private/masculine-public divide so that women are confined to informal work within the household while men are sent outside of it for compensated labor, men are situated as the more 'suitable,' and hence, more likely migrants. Using a conventional measure in the family demography literature of traditional gender role performance, the analysis looks at the number of hours spent per week on household chores and childcare, hypothesizing that men and women who most stratify their time spent on household tasks are those who most closely adhere to traditional gender roles, and resultantly, are those most likely to exhibit significant differences in migration risk relative to men and women who share housework.

The analysis focuses on the case of Mexico by utilizing household survey data from the Mexican Family Life Survey (MxFLS) to run discrete-time, event history models. Since single-headed households show different patterns of time use, the data is restricted to just married individuals with the goal of differentiating between the division of household labor among structurally similar families. The results show that men and women who perform the least and most household work, respectively, show significantly different likelihoods of migration where traditional men are much more likely to migrate than traditional women. Alternatively, men and women who equally perform the average amount of household chores are shown to have equal likelihoods of migrating, supporting the hypothesis that migration decision-making is influenced by gender role performance.

THEORETICAL FRAMEWORK

Combining the Public and Private Spheres in Migration Research

The history of gender's incorporation into mainstream migration research has been uneven. Calling attention to past research's myopic focus on economically motivated, young, male migrants, scholars like Houstoun et al. (1984) and Seller (1975) highlighted the critical, yet overlooked, role that women played in historic migrant flows. Following this, migration research underwent an era of gender mainstreaming in which researchers oriented their work towards inclusive theorizing about the role of women within the migration process (Herrera 2013; Pedraza 1991).

One part of this effort called for framing migration as a process that intersects with both the public and private spheres (Lopata 1993; Pedraza 1991; Weinberg 1988). Previous work focused heavily on understanding migration as a process patterned by public sphere factors, particularly the uneven distribution of labor, production, and wages in sending and receiving

areas (Harris and Todaro 1970; Todaro 1969). Initial efforts to incorporate the influence of the private sphere on migration were largely gender blind, concentrating on the household as a collective and harmonious decision-making unit (Stark and Bloom 1985; Stark and Lucas 1988; Stark 1984). As gendered perspectives were applied to this body of work, it became clear that private sphere (i.e. domestic) relations were integral to understanding the migration process wherein gender shapes who moves and who stays (Curran and Rivero-Fuentes 2003; Geist and McManus 2012; Hondagneu-Sotelo 1994; Massey, Fischer, and Capoferro 2006).

In other words, the decision regarding who migrates can sometimes be informed by patriarchal gender norms that differentially influence the likelihood of migration for various family members. Much evidence has shown that there persists a gender role narrative of the male breadwinner and female homemaker-dependent, and such roles often dictate that men belong outside the home for labor while women belong within it to perform childcare and housework (Acker 1992; Ahlander 1995; Miller and Garrison 1982; Zuo and Tang 2000). Due to these expectations, adhering to these traditional gender roles can limit the likelihood of migration for women by shaping the idea that men are more suitable migrants and assigning women to traditional household tasks based on the feminine-private/masculine-public divide (Lopata 1993). It should follow, then, that more traditional men and women should show patterns of significant differences in migration likelihood where men are more likely to migrate than women since the latter is more directly constrained by homemaker expectations. In contrast, egalitarian men and women should both be less constrained by such roles and thus are expected to have the same likelihood of migrating.

Gender Roles and the Division of Household Labor

Though it is easy to speak of traditional versus egalitarian gender roles, the literature has approached the study and measurement of such concepts in a number of ways. Predominantly, however, the family demography literature has conventionally measured gender roles in terms of the division of household labor (Atkinson 1984; Calasanti and Bailey 1991; Folbre 1989; Miller and Garrison 1982; Yoder, Perry, and Saal 2007; Zuo and Tang 2000). The actual definition of the division of household labor also varies from study to study, but it generally involves some absolute or relative unit measure of time spent on activities related to maintaining the home and family (Shelton 1996). Such activities include traditional domestic work like cooking, cleaning, and childcare. Consequently, women and men who adhere to traditional gender roles are expected to perform the most and least hours of household chores, respectively. Alternatively, women and men who are more egalitarian should perform an equal number of hours on household chores.

It should be noted that two other explanations have been used to explain the division of household labor in the family demography literature besides gender role performance: relative resources and time availability (Godwin 1991; Shelton 1992). The idea of relative resources assumes that household chores are a broadly undesirable activity. It purports that individuals possess certain resources that increase their power to refrain from performing chores like education, wealth, employment, etc. and that the resulting division of household labor is the consequence of each individual's relative resources. The time availability explanation simply proposes that individuals perform an amount of household labor that is in proportion to the free time they possess relative to other family members (i.e. time that is not spent on other activities like formal employment). In order to control for the relative resources explanation, the analysis will account for individual education and income. Additionally, the analysis will also control for

employment status and number of adults in the household to account for the time availability explanation since being employed and having other adults in the household should change one's time availability. Any residual effect for the interaction between gender and chores should then lend support to the gender roles theory specifically.

SETTING

In order to study micro-level events related to the division of household labor and migration-decision making, it is common practice to draw on household survey data. Since cross-national comparability is difficult to obtain given the differences that exist between national surveys, this study focuses on the case of Mexico. The rationale for focusing on the Mexican case is threefold: (1) There is a longstanding history of research on Mexican migration and its determinants, so it is possible to engage with gaps that exist within that literature; (2) The Mexican migration stream is representative and somewhat generalizable to other industrializing country migration streams; (3) Gender roles within Mexico are representative of roles that persist in many other patriarchal societies regarding male breadwinner and female homemaker-dependent tropes, making it well-suited for the study of traditional versus egalitarian gender role adherence.

DATA AND METHODS

Data

The analysis utilizes data from the Mexican Family Life Survey (MxFLS), which is the first nationally representative survey of the Mexican population that follows respondents regardless of their migration decisions. The survey was created to more deeply understand the intersection between economic, socio-demographic, geographic, and biological characteristics of the Mexican population. Given MxFLS's multi-thematic design, it is well suited for studying the

relationship between migration and gender. The baseline sample design is probabilistic, stratified, and multi-staged in which every phase is an independent sample of households in Mexico during 2002. The primary sampling units were chosen according to pre-established characteristics meant to be representative of the Mexican population. In total, approximately 8,440 households were sampled, corresponding to about 35,000 individuals living within 150 communities (Rubalcava and Teruel 2006, 2008, 2013). Using all survey waves that are currently available, the analysis will draw on data from Wave 1 (2002), Wave 2 (2005-2006) and Wave 3 (2009-2012). The data used for analysis was reshaped to hazard file format, and the final sample was limited to just those who are married and at risk of migrating independently (i.e. those age 15 and over). The final sample includes a total of 22,661 person-interval observations, where interval refers to the periods between sequential waves, for a total of 13,474 unique individuals.

MxFLS is characterized by a moderate percentage of missing observations along some variables, particularly that for migration (~ 17%). Since many respondents were interviewed even if they decided to migrate between waves, the issue of sample loss due to migration is not as problematic as it is for similar kinds of surveys. Wave 2 and Wave 3 managed to relocate and re-interview about 90% of the original sampled households, the remainder of which can partially account for the missing observations. It is unclear what may account for the remaining attrition from the sample. This paper makes an effort to partly address the issue of missing cases by running the analysis separately on both a listwise deleted data set and on an multiply imputed data set created via chained equations using the mice package in R (van Buuren and Groothuis-Oudshoorn 2011). Only results from the multiply imputed data set will be reported because both are substantively similar.

Table 1 Descriptive Statistics

	N	Min	Mean	Max	S.D.
Log income	22,661	0.00	9.25	23.03	3.69
Age	22,661	15	44.06	100	15.03
Migration history count	22,661	0	0.65	15	1.15
Migrant network	22,661	0	0.20	0.53	0.06
Number of children	22,661	0	1.3	9	1.42
Number of adults	22,661	0	2.76	12	1.41
Log hours of chores	22,661	0	2.16	5.28	1.69
Sex					
Male	10,931	-	-	-	-
Female	11,730	-	-	-	-
Wage job					
Yes	11,450	-	-	-	-
No	11,211	-	-	-	-
Education					
No high school	18,451	-	-	-	-
High school or above	4,210	-	-	-	-
Toilet					
No	5,470	-	-	-	-
Yes	17,191	-	-	-	-
Dwelling status					
Own/paying off	17,343	-	-	-	-
Rent	1,262	-	-	-	-
Borrow/ejido land	4,056	-	-	-	-
Rural					
No	13,528	-	-	-	-
Yes	9,133	-	-	-	-

Methods

In order to study binary outcomes for longitudinal data, the analysis utilizes discrete-time, event history models and logistic regression equations. The outcome of interest is the first observed migration, which is defined as the first reported migration since the beginning of the survey where the individual is away for three or more months from anywhere beyond their original community. Only married individuals who resided in Mexico at the beginning of the survey were included in the sample. They were retained in the sample until they experienced a migration event or exited the survey due to death, attrition, or survey completion. The structure

of the data file itself is in hazard (i.e. long) form, so that individual observations run from the intervals between t and t + 1 as well as between t + 1 and t + 2. All time-varying independent variables are lagged by one wave so that the report of a migration event is considered at either t + 1 or t + 2 while associated independent variables are measured at t and t + 1, respectively. Time-unvarying independent variables are held constant at their values at time t.

In order to measure the division of household labor, the analysis uses the aggregated log number of hours spent during the past week on cooking and preparing food, washing clothes, cleaning the house, and taking care of elder or sick people and/or children. Other controls are included in order to account for conventional socio-demographic characteristics like age, income, education, sex, dwelling status, number of children, number of other household members, etc. Table 1 includes the descriptive statistics for all the final variables used in the analysis while Table 2 describes how each variable is defined. Some variables are a little less conventional but sometimes appear in the migration literature like migration history, which counts the number of past migration events, and migrant network, which is the proportion of people in each individual's community with a migration history. The presence of a toilet is the least common, though it is intended to measure marginalization from basic infrastructure, which has been shown to limit the ability to migrate.

Three models will be presented in total to illustrate the test of the hypothesis using the following logistic equation to estimate the log odds of migrating:

$$\log\left(\frac{P_{migration}}{1 - P_{migration}}\right) = \alpha + \beta'x_{it}$$

where α represents the intercept, β' is a vector of estimated coefficients for each independent variable, and x_{it} represents the value for individual i at time interval t, though some variables are time invariant.

Table 2   Definitions of Variables

Variable	Definition	Time-Varying
Outcome Variable		
Any migration	Whether a respondent migrates: internationally, domestically, permanently, and/or temporarily = 1 or does not migrate = 0	Yes
Primary Independent Variables		
Log Chores	Log total number of hours spent on chores during the past week, Sunday through Monday, including time on cooking/preparing food, washing the dishes, cleaning the house, and taking care of children and/or elders	Yes
Log Chores * Sex	Interaction between the log number of hours spent on household chores and sex, where 0 = female and 1 = male	Yes
Control Variables		
Individual		
Sex	Reported sex of individual: male = 1 and female = 0	Yes
Age	Age of individual in years	Yes
Education	Any high school education or above = 1 or no high school and below = 0	Yes
Income	Log of any income (agricultural or non-agricultural) made within past 12 months	Yes
Wage job	Whether a respondent has had a wage-paying job within the past 12 months: no = 0 and yes = 1	Yes
Migration history	Count of any previous individual migration events	No
Household		
Dwelling status	Status of the primary dwelling unit for the household: borrowed or ejido land = 2, rented = 1 or owned/paying off = 0	Yes
Infrastructure access—toilet	Has toilet = 1 or does not have toilet = 0	Yes
Community		
Rural	Household resides in a community with a population less than 2500 = 1 or in a community with a population at or above 2500 = 0	No
Migrant network	Proportion of surveyed individuals with any migration history in respondent's community divided by total number of surveyed individuals from that community	No

The first model just includes the baseline specification with all the control measures. The second adds hours of chores as an additional variable to illustrate the influence of chore performance on the log odds of migration. The third, and final, model includes an interaction between sex and chores in order to specifically look at both sex and the division of household

labor in relation to migration likelihood.

Due to the structure of hazard files as well as the household-level scope of some of the variables, the robcov() command from the rms package in R was used to adjust for clustering at the individual and household levels. The function uses the Huber-White method to adjust the variance-covariance matrix of a fit from maximum likelihood in order to correct for heteroscedasticity and for correlated responses from cluster samples (Harrell, Jr. 2014).

RESULTS

Socio-Demographic Measures

The estimated coefficients for the socio-demographic controls were generally consistent across all models and with the existing literature on Mexican migration. From Model 1 in Table 3, being male is shown to be positive and significant for increasing the likelihood of migration. Age is slightly negative and very significant, so as age increases, the likelihood of migrating decreases. Neither having a wage-paying job nor any form of income over the past 12 months are significant in predicting the likelihood of migration. Having a high school education or above has a positive and large influence on increasing migration risk. Unsurprisingly, having some personal history of migration also increases the likelihood of migrating.

At the household level, having a toilet has a large and significant influence on migration risk, while having a dwelling status that involves renting or borrowing also positively and significantly influences the likelihood of migration. The number of children in the household, the number of adults, whether or not the residence is rurally located, and having a migrant network all have small and insignificant effects.

Gender, the Division of Household Labor, and Migration

In Model 2 in Table 2, the estimated coefficient for chores is exp(0.04) = 1.04 and is not

significant. So, taken alone, the number of hours of chores an individual performs does not

influence the likelihood of migration. However, Model 3 demonstrates a different relationship.

When hours spent on chores is interacted with sex, the effect is relatively large and significant at

exp(0.11) = 1.12. Since the analysis controls for the relative resources and time availability

explanations, this supports the hypothesis that chore performance is a form of gender role

performance and that this relationship influences the decision to migrate.

Table 3   Discrete-Time, Event History, Logistic Regression Models

| | Dependent Variable: First Observed Migration | | | | | |
| | Model 1: Baseline | | Model 2: + Chores | | Model 3: + Chores*Sex | |
	β	s.e.	β	s.e.	β	s.e.
Intercept	-1.91***	0.05	-2.07***	0.21	-1.82***	0.25
Individual						
Sex, male	0.34***	0.05	0.43***	0.12	0.15***	0.17
Age	-0.03***	0.00	-0.03***	0.00	-0.03***	0.00
Log total income	-0.01	0.01	-0.01	0.01	-0.01	0.01
Wage job, yes	0.06	0.09	0.07	0.09	0.06	0.09
Education, high school +	0.24**	0.08	0.24**	0.08	0.23**	0.08
Migration history	0.14***	0.02	0.14***	0.02	0.14***	0.02
Household						
Toilet, yes	0.24***	0.09	0.24**	0.09	0.24*	0.09
Dwelling, rent	0.90***	0.11	0.90***	0.11	0.90***	0.11
Dwelling, borrow/ejido	0.22*	0.09	0.22*	0.09	0.22*	0.09
Number of children	0.02	0.02	0.02	0.02	0.02	0.02
Number of adults	-0.02	0.02	-0.02	0.02	-0.02	0.02
Community						
Migrant network	0.03	0.45	-0.02	0.45	-0.02	0.45
Rural, yes	0.05	0.08	0.06	0.08	0.08	0.08
Chores			0.04	0.03	-0.03	0.04
Chores*Sex, male					0.11*	0.05
No. of Observations		22,661		22,661		22,661
Likelihood Ratio		471.34		471.67		476.30

Note: p(<.1+ , <0.05 *, <0.01 **, <0.001***)

In order to illustrate this point more clearly, the plot in Figure 1 shows the predicted probabilities for men and women who perform traditional and egalitarian gender roles with estimated 95% confidence intervals derived from bootstrap methods. Holding all else equal, traditional men are calculated to perform the 1st quartile amount of hours on chores while traditional women are calculated to perform the 3rd quartile amount of hours. Likewise, both egalitarian men and women are calculated to perform the mean amount of hours on chores. This is a conservative specification since the most traditional men and women would divide household labor into even greater extremes with men completing no housework at all and women completing all of it. As demonstrated in Figure 1, traditional men are significantly more likely to migrate than traditional women but egalitarian men and women have the same predicted probabilities of migrating.

Figure 1. Predicted Probabilities of Migration for Traditional and Non-Traditional (Egalitarian) Men and Women
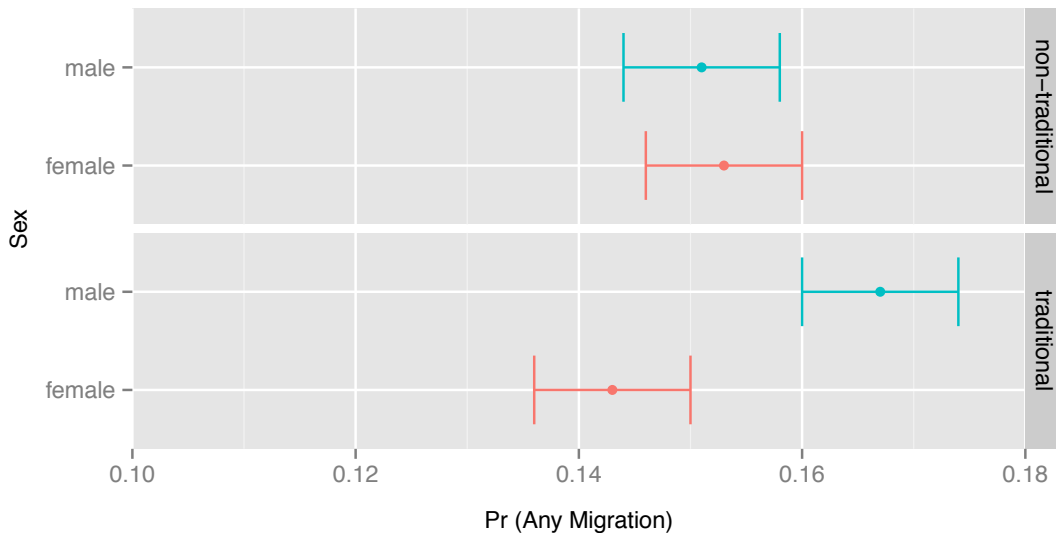
CONCLUSION

Based on these results, this paper argues that there is support for the theory that gender roles heavily pattern migration risk for men and women. It posits that this is due to the division

of the public and privates spheres along gendered lines wherein women are relegated to household labor while men are expected to participate in public sphere activities, including migration.

References

Acker, Joan. 1992. "From Sex Roles to Gendered Institutions." *Contemporary Sociology* 21(5):565–69.

Ahlander, Nancy Rollins, Bahr, Kathleen Slaugh. 1995. "Beyond Drudgery, Power, and Equity: Toward an Expanded Discourse on the Moral Dimensions of Housework in Families." *Journal of Marriage and the Family* 57(1):54–68.

Atkinson, Jean, Huston, Ted L. 1984. "Sex Role Orientation and Division of Labor Early in Marriage." *Journal of Personality and Social Psychology* 46(2):330–45.

Van Buuren, Stef, and Karin Groothuis-Oudshoorn. 2011. "Mice: Multivariate Imputation by Chained Equations in R." *Journal of Statistical Software* 45(3):1–67.

Calasanti, Toni M., and Carol A. Bailey. 1991. "Gender Inequality and the Division of Household Labor in the United States and Sweden: A Socialist-Feminist Approach." *Social problems.* 38(1):34.

Curran, Sara, and Estela Rivero-Fuentes. 2003. "Engendering Migrant Networks: The Case of Mexican Migration." *Demography* 40(2):289–307.

Folbre, Nancy, Hartmann, Heidi. 1989. "The Persistence of Patriarchal Capitalism." *Rethinking Marxism* 2(4):90–96.

Geist, Claudia, and Patricia A. McManus. 2012. "Different Reasons, Different Results: Implications of Migration by Gender and Family Status." *Demography* 49(1):197–217.

Godwin, Deborah D. 1991. "Spouses' Time Allocation to Household Work: A Review and Critique." *J Fam Econ Iss Lifestyles Family and Economic Issues* 12(3):253–94.

Harrell, Jr., Frank E. 2014. *Rms: Regression Modeling Strategies*. Retrieved (http://CRAN.R-project.org/package=rms).

Harris, John R., and Michael P. Todaro. 1970. "Migration, Unemployment and Development: A Two-Sector Analysis." *American Economic Review* 60(1).

Herrera, Gioconda. 2013. "Gender and International Migration: Contributions and Cross-Fertilizations." *Annual Review of Sociology* 39(1):471–89.

Hondagneu-Sotelo, Pierrette. 1994. *Gendered Transitions: Mexican Experiences of Immigration*. Berkeley, Calif.: University of California Press. Retrieved September 12, 2014 (http://public.eblib.com/EBLPublic/PublicView.do?ptiID=837274).

Houstoun, MF, RG Kramer, and JM Barrett. 1984. "Female Predominance of Immigration to the United States since 1930: A First Look." *The International migration review* 18(4 Spec No):908–63.

Lopata, Helena Znaniecka. 1993. "The Interweave of Public and Private: Women's Challenge to American Society." *Journal of Marriage and the Family* 55(1):176–90.

Massey, Douglas S., Mary J. Fischer, and Chiara Capoferro. 2006. "International Migration and Gender in Latin America: A Comparative Analysis." *International Migration* 44(5):63–91.

Miller, Joanne, and Howard H. Garrison. 1982. "Sex Roles: The Division of Labor at Home and in the Workplace." *Annual Review of Sociology* 8:237–62.

Pedraza, Silvia. 1991. "Women and Migration: The Social Consequences of Gender." *Annual Review of Sociology* 17:303–25.

Rubalcava, Luis, and Graciela Teruel. 2006. "Mexican Family Life Survey, First Wave." Retrieved (www.ennvih-mxfls.org).

Rubalcava, Luis, and Graciela Teruel. 2008. "Mexican Family Life Survey, Second Wave." Retrieved (www.ennvih-mxfls.org).

Rubalcava, Luis, and Graciela Teruel. 2013. "Mexican Family Life Survey, Third Wave." Retrieved (www.ennvih-mxfls.org).

Seller, Maxine S. 1975. "Beyond the Stereotype: A New Look at the Immigrant Woman." *Journal of Ethnic Studies* 3(1):59–71.

Shelton, Beth Anne. 1992. *Women, Men, and Time: Gender Differences in Paid Work, Housework, and Leisure*. New York: Greenwood Press.

Shelton, Beth Anne, John, Daphne. 1996. "The Division of Household Labor." *Annual review of sociology.* 22:299.

Stark, Oded. 1984. "Bargaining, Altruism, and Demographic Phenomena." *Population and Development Review* 10(4):679–92.

Stark, Oded, and David E. Bloom. 1985. "The New Economics of Labor Migration." *The American Economic Review* 75(2):173–78.

Stark, Oded, and Robert E. B. Lucas. 1988. "Migration, Remittances, and the Family." *Economic Development and Cultural Change* 36(3):465–81.

Todaro, Michael P. 1969. "A Model of Labor Migration and Urban Unemployment in Less Developed Countries." *American Economic Review* 59(1).

Weinberg, Sydney Stahl. 1988. *The World of Our Mothers: The Lives of Jewish Immigrant Women*. Chapel Hill: University of North Carolina Press.

Yoder, Janice D., Rachelle L. Perry, and Ellen Irwin Saal. 2007. "What Good Is a Feminist Identity?: Women's Feminist Identification and Role Expectations for Intimate and Sexual Relationships." *Sex Roles: A Journal of Research* 57(5-6):365–72.

Zuo, Jiping, and Shengming Tang. 2000. "Breadwinner Status and Gender Ideologies of Men and Women Regarding Family Roles." *Sociological Perspectives* 43(1):29–43.