# **UCLA**

# **UCLA Previously Published Works**

### **Title**

When leaving is normal and staying is novel: Men's labor migration and women's employment in rural Mozambique.

## **Permalink**

https://escholarship.org/uc/item/2gn3g8cd

## **Journal**

Migration Studies, 9(3)

## **ISSN**

2049-5838

## **Authors**

Agadjanian, Victor Hayford, Sarah R Oh, ByeongDon

## **Publication Date**

2021-12-15

### DOI

10.1093/migration/mnz043

Peer reviewed

# When leaving is normal and staying is novel: Men's labor migration and women's employment in rural Mozambique

Victor Agadjanian\*,<sup>†</sup>, Sarah R. Hayford<sup>‡</sup> and ByeongDon Oh<sup>§</sup>

## **Abstract**

Considerable cross-national research has examined the impact of international labor migration on livelihoods in sending households and communities. Although findings vary across contexts, the general underlying assumption of this research is that migration represents a novel income-generating alternative to local employment. While engaging with this assumption, we also argue that in many sending communities where labor migration has been going on for generations, it is the decision not to migrate and instead to pursue local livelihood opportunities that might constitute a true departure from the expected behavior. Importantly, both the decisions to migrate and not to migrate are part of a household strategy shaped by gendered negotiation and bargaining. Building on these propositions, we use rich survey data from rural Mozambique, a typical setting of long-established large-scale international male labor out-migration, to examine married women's gainful employment outside subsistence agriculture as it relates to their husbands' migration or local work. We find a somewhat lower likelihood of employment among migrants' wives, compared with nonmigrants' wives, and this pattern strengthens with increased duration of migration. However, we also find substantial differences among nonmigrants' wives: women married to locally employed men have themselves by far the highest probability of employment, while wives of nonemployed men are no different from migrants' wives, net of other factors. These findings are discussed in light of interconnected gendered complexities of both migration-related and local labor market constraints and choices.

Keywords: employment; gender; labor migration; rural family; Sub-Saharan Africa

<sup>&</sup>lt;sup>†</sup>Department of Sociology, University of California-Los Angeles, Los Angeles CA, 90095, USA

Department of Sociology, Ohio State University, Columbus, Ohio, 43210, USA

Spepartment of Sociology, University of Kansas, Lawrence, Kansas, 66045, USA

<sup>\*</sup>Corresponding author. Email: agadjanian@soc.ucla.edu

### 1. Introduction

As migration increases in volume and diversity worldwide, a growing number of studies have addressed its complex and multifaceted economic and social consequences for non-migrating household members (Zachariah, Mathew and Irudaya 2001; World Bank 2006; Arias 2013). Labor market behavior of nonmigrants has been one of the main foci of this scholarship, and the literature, with few exceptions, typically concludes that migration is associated with decreased likelihood of labor force participation among nonmigrating household members: remittances received from the migrant reduce the financial need for employment, while the migrant's absence increases the burden of household duties that those household members are left to shoulder (Rodriguez and Tiongson 2001; Funkhouser 2006; Kim 2007; Acosta, Lartey and Mandelman 2009; Grigorian and Melkonyan 2011; Justino and Shemyakina 2012; Mughal and Makhlouf 2013). In this study, we test this general proposition by using rich survey data from rural southern Mozambique, a setting of large-scale labor out-migration, to examine employment outside subsistence agriculture among migrants' wives.

While analyzing the complexities of social and economic configurations of migrant-sending households, studies typically treat households without migrants as a homogeneous comparison group. Moreover, it is also usually implied in the extant scholarship that labor migration, especially from rural areas, constitutes a novel risk-diversifying economic behavior, at least in comparison with subsistence farming, that triggers transformations of rural households and of rural society in general. However, while migration may indeed have a profound transformative impact on sending households and communities, local labor market alternatives to subsistence agriculture may be equally, if not more, consequential for household and individual well-being. In this study, we posit that labor migration per se is not necessarily an engine of change, especially in resource-limited settings where it has been going on for generations. We also argue that both in households that opt for labor migration as an income generator and in households that make a living by complementing or replacing subsistence agriculture with local cash-generating employment, labor force participation of household members is a coordinated household strategy reflecting gendered negotiation and bargaining.

Applying this conceptual lens, we use rich survey data from rural Mozambique, a low-income sub-Saharan setting with traditionally high levels of male out-migration mainly to neighboring South Africa, to examine variations in rates of rural women's employment outside subsistence agriculture. In doing so, we consider the diversity not only among households with migrants and with different experiences of labor migration but also among nonmigrant households. Following the core of the existing scholarship, we first look at the association of men's out-migration with their marital partners' nonfarming employment. We then move beyond the traditional approach to this association by disaggregating nonmigrants' wives based on their husbands' employment—in subsistence agriculture vs. outside of it. While we find limited evidence that women married to migrants have a lower likelihood of employment than nonmigrant wives as a whole, we detect a stark difference among nonmigrants' wives: women who are married to locally employed men have themselves higher employment rates than those who are married to

nonemployed men regardless of other characteristics. The similarly low employment probabilities among migrants' wives and among women married to nonemployed nonmigrants illustrate, we argue, the role of labor migration as a traditional mechanism of household reproduction that confines women to subsistence agriculture and household maintenance duties. In contrast, nonsubsistence employment among women whose husbands work locally may be seen as part of a relatively novel household livelihood strategy in that context. We conclude by situating our findings within the problematique of gendered migration-related and local labor market constraints and choices.

## 2. Background

A substantial body of scholarship has focused on the effects of international migration on labor force participation outside subsistence agriculture of nonmigrating family members. While the connection between migration and labor supply in sending areas is complex and context-specific (Chami et al. 2011; Jackman 2014; López-Feldman and Escalona 2017), most studies conclude that migration discourages nonmigrating household members from engaging in paid employment, largely because remittances sent by migrants meet household financial needs. For example, Rodriguez and Tiongson (2001) found that in the Philippines international labor migration is associated with lower levels of labor force participation among nonmigrating relatives. Funkhouser (2006) reached a similar conclusion using longitudinal data from Nicaragua. Acosta, Lartey and Mandelman (2009) reported a negative association between the amount of migrant remittances and labor supply in nonmigrating households in El Salvador. Grigorian and Melkonyan (2011) documented a decline in work hours in remittance-receiving households in Armenia. A similar decrease in labor force participation and work time was found in remittance-receiving households in Tajikistan (Justino and Shemyakina 2012) and Pakistan (Mughal and Makhlouf 2013). Kim (2007) also reported a negative effect of migrant remittances on labor force participation in Jamaica even though the association between receipt of remittance and working hours was not significant in that context.

In addition to the impact of remittances on household economic conditions, labor migration may influence the employment patterns of nonmigrant household members through its effects on labor supply. For example, in rural China, women's involvement in subsistence farming often increases as a result of out-migration of other adult household members, largely to offset the loss of migrants' agricultural labor (Mu and van de Walle 2011; Démurger and Li 2013). In addition to rising demands on nonmigrating family members' agricultural labor, their paid employment may also be hindered by the increase of their share of household duties and physical work burden as a result of migration (Rodriguez and Tiongson 2001; Maharjan, Bauer and Knerr 2012; Khan and Valatheeswaran 2016). In fact, Binzel and Assaad (2011) have argued that the need to replace migrants' farm and household labor is a more important reason for lower employment rates among nonmigrating family members than any improvement of household financial security through migrant remittances.

Finally, some qualitative evidence points to the role of gendered power dynamics in the low labor force participation of migrants' wives. This evidence documents migrant husbands' frequent opposition to their nonmigrating wives' gainful employment, especially in highly patriarchal settings, where husbands' normative authority is further reinforced by their migration status. In such settings, some migrants would not allow their wives to work outside the home because the wives' work and income might threaten the men's decision-making dominance and might also send a message to the community that their migration is not generating enough returns to ensure household material well-being (Menjívar and Agadjanian 2007; Menjívar 2011).

Yet, several studies have questioned the negative connection between migration and local employment of nonmigrating household members. Thus, Cox-Edwards and Rodríguez-Oreggia (2009), in an analysis of migration and remittance data from Mexico, found only limited evidence that migration remittances affect labor force participation of nonmigrating household members. And Urama et al. (2017) in their study in Nigeria detected a negative effect of migration remittances on labor supply only among certain segments of the nonmigrating population, such as self-employed farmers, adolescents, and elderly persons. Research has also shown that the association of migration with local employment may differ between urban and rural sending settings. Thus, Aysa and Massey (2004) in their study in Mexico found a positive effect of men's migration on women's employment only in urban areas, where nonagricultural job opportunities for women are more plentiful than in the countryside. In contrast, Khan and Valatheeswaran (2016) argued that the impact of migration on labor supply in rural sending areas is greater than in urban areas.

Importantly, migration scholarship theorizes both migration and labor force participation of migrants' left-behind household members as parts of a household's broader income-generation and risk-pooling strategy (Cox-Edwards and Rodríguez-Oreggia 2009; Stark 1991; Itzigsohn 1995). The 'intrafamilial contract' (Stark and Lucas 1988) shapes its participants' economic behavior and contributions. More broadly, this perspective has roots in the new home economics (Becker 1981), which characterizes all family decisions, including men's and women's work, as efforts to maximize collective household utility. Critiques of the new home economics have challenged the idea that all household members' needs are equally accounted for in making such decisions and have pointed to the importance of power, negotiation, and bargaining in reconciling potentially conflicting goals (Lundberg and Pollak 1994; Haddad, Hoddinott and Alderman 1997).

In particular, the intra-household division and negotiation of labor are inevitably and profoundly gendered. In rural subsistence economies, agricultural tasks are usually highly gender-specialized. For example, in many sub-Saharan settings, women are typically responsible for such farming tasks as sowing, weeding, and harvesting while men perform such activities as plowing or guarding the field, as well as the tasks that have higher perceived social importance, such as cattle husbandry. Hence men's withdrawal from their gendered shares of agricultural activities, as typically happens when men migrate, may not necessarily lead to a compensatory increase of women's respective shares. At the same time, the connection between migration and nonmigrants' employment outside subsistence farming is also gendered, with the negative effects of migration on local paid work being generally stronger for left-behind women than men as women are more likely to exit the labor market, or less likely to enter it, once the flow of remittances is established (Rodriguez and Tiongson 2001; Acosta 2006; Amuedo-Dorantes and Pozo 2006; Lokshin and Glinskaya 2009; Mendola and Carletto 2012). For nonmigrating wives, the negative

effects tend to strengthen with increased duration (Agadjanian and Sevoyan 2014), as well as distance (Wouterse and Taylor 2008) of the husband's migration.

While the household negotiations of labor market engagement are complex, there is no empirical basis to expect that the mechanisms, process, and outcomes of these negotiations should be fundamentally different between households with and without migrants (Nobles and McKelvey 2015). Yet, while examining the connections between men's migration and their marital partners' employment, much of migration scholarship tends to treat the households that do not experience migration as a uniform comparison group. In this study, we argue that not unlike the employment of migrants' wives, labor force participation of nonmigrants' wives is part of a household economic strategy and is collectively negotiated, deployed, and ensured as such. Hence, employment choices and decisions of women arise in coordination with those of their marital partners whether those partners migrate or not, potentially leading to heterogeneity of spousal employment configurations within both types of households.

## 3. Hypotheses

Our analysis focuses on women's work outside subsistence agriculture (hereafter also simply 'employment' or 'work') in rural Mozambique. Guided by the literature on the consequences of male labor migration for nonmigrating women's employment, we start the analysis by looking at the association between the migration of men and current employment of their nonmigrating marital partners in our study setting. We look at husband's current labor migration status, as well as at the cumulative experience and economic outcomes of his migration. Following the predominant empirical evidence, we hypothesize that wives of current migrants will be less likely to work than those of nonmigrants, regardless of other factors (Hypothesis 1). Shifting attention to the cumulative effect of migration, we also posit that material benefits of migration accrue over time and may persist even after migration ceases. Hence, we hypothesize that, regardless of the husband's current migration status, the likelihood of a woman's current employment will decrease as the time spent by her husband in migration in the past several years increases (Hypothesis 2). To capture the diversity of migration's economic outcomes for sending households, we disaggregate migrants' wives on the basis of the economic impact of migration on the household, measured by remittances and other transfers. We hypothesize that the negative effect of migration on women's employment will be more pronounced among more successful migrants (Hypothesis 3).

Pursuing our theoretical quest outlined earlier, in addition to accounting for the diversity of husband's migration experiences, we seek to capture the heterogeneity of nonmigrant men's employment and its possible implications for their wives' work. Here, we are guided by our general assumption that spouses' employment in nonmigrant families, not unlike employment of their migration-involved counterparts, is part of coordinated family economic behavior. In rural settings where men's labor migration is a well-established and, in fact, almost traditional family livelihood strategy, men's local nonagricultural employment is a relatively novel labor market alternative. However, both men's labor migration and their local employment options are reflective of the household gendered division of labor. In this sense, therefore, men's local nonagricultural employment should affect their marital partners' engagement in the nonagricultural labor market similarly to how migrant men's work affects that of their wives, as both migration and local employment withdraw men from subsistence farming. Hence, we expect to find the rates of nonfarming employment among women married to locally employed men to be comparably low as those of women married to migrant men (Hypothesis 4a). By extension, women whose husbands are fully engaged in subsistence agriculture should have higher rates of nonagricultural employment than wives of migrants (Hypothesis 4b).

We proceed with a description of our study setting. We then describe our data and analytic strategy and present the results of the analysis. We conclude by situating the findings within a broader context of gendered socioeconomic dynamics in low-income rural contexts with high prevalence of male international labor out-migration.

## 4. Setting

The study uses household survey data collected in rural areas of Gaza province in southern Mozambique, a nation of almost 30 million people in southeast Africa with a GNI per capita of c. 420 USD (World Bank 2019). The study area includes four districts of Gaza province, with a total area of about 6,000 sq. m and the population of some 700,000 (INE 2017). This area is largely monoethnic, dominated by the Changana ethnicity, and is predominantly Christian. Its traditional social organization is based on a patrilineal kinship system and its rural economy is dominated by subsistence agriculture, fishing, and animal husbandry. Whereas women typically perform most farm work throughout the year, including sowing, weeding, and harvesting, men are usually responsible for such tasks as plowing and harvest protection from wild animals (and occasionally from human thieves), as well as fishing and taking care of the livestock. Low and unpredictable agricultural yields, paucity of alternative local employment opportunities, and proximity to the Republic of South Africa, Mozambique's much more developed neighbor, have all encouraged labor male out-migration.

This migration, primarily to South African mines, began well before Mozambique's independence from Portugal in 1975 and has continued to date, shaping the livelihoods of many rural families. In fact, local men's migration to South Africa has become normalized as a way to support the family and in some cases, even to start it—by earning money for bridewealth payments. In comparison, women's work-related migration has been limited (Dodson 2000). Notably, in recent decades, while the massive scale of male labor migration has persisted, both the nature and outcomes of migration have been changing. Once an orderly process managed through formal recruitment and payment of fixed wages, migration to South Africa has become increasingly informalized, with less consistent and predictable pay and duration (de Vletter 2007). Migration to cities in Mozambique, especially Maputo, its capital and largest metropolitan area, while smaller in scale, is also characterized by increasing informality and unpredictability. This diversification of migration forms and outcomes has had considerable implications for various aspects of household functioning and well-being. Thus, Agadjanian and Hayford (2018) found that in the study setting economically more successful migration (i.e. migration that generates stable returns

to the left-behind household) is associated with lower risk of marital dissolution, compared to less successful migration. Variation in economic outcomes of migration was also shown to correlate with women's worries about contracting HIV, as such were significantly more common among wives of more successful migrants (Agadianian, Arnaldo and Cau 2011). Wives of more successful migrants were also more likely to want another child, regardless of their current number of children and other characteristics (Agadjanian, Yabiku and Cau 2011). The contrasting outcomes of migration have also been shown to affect migrants' children; compared to children of less successful migrants, children of more successful migrants were less likely to die before the age of five years (Yabiku, Agadjanian and Cau 2012) and were less likely to discontinue schooling (Yabiku and Agadianian 2017).

Although Mozambique has seen considerable macroeconomic development over most of the past three decades, this development has had little effect on its rural economy. The rural labor market in the study area has remained limited to low-revenue informal activities such as farming for pay or a share of harvest, charcoal production, beverage brewing, petty commerce, craftsmanship, and similar occupations. With meager prospects for stably rewarding formal jobs, many paid activities (particularly small-scale and informal jobs) are performed in parallel with subsistence farming. These activities provide the households with occasional cash income to cover basic necessities such as clothes, food items that need to be purchased on the market (e.g. salt, sugar, tea), medicines, school supplies, or mobile phone credit recharge. More substantial and continuous engagement in such activities inevitably leads to a reduction of labor input in subsistence agriculture.

## 5. Data and method

The analysis employs representative household survey data collected in 2011 from a sample of rural women aged 18-45 years in 56 villages in four districts of Gaza province in southern Mozambique as part of a larger longitudinal project 'Men's Migrations and Women's Lives' (MMWL). The survey was carried out by the Center for African Studies of Eduardo Mondlane University, Mozambique. Its design and implementation was approved by the Institutional Review Board of Arizona State University, USA (additional information about the survey is available from the authors upon request). The survey instrument, administered through face-to-face interview, contained a variety of questions on women's individual and household characteristics, including their employment and the employment of their marital partners if they had one. The instrument also included detailed questions about husband's migration history and economic outcomes of migration. Although these data, combined with similar migration data from previous waves, provide rich information about husband's migration, they cannot fully account for potential endogeneity of migration decisions. However, the massive scale and normative nature of men's out-migration from the study setting and the depth of migration history information in the data help to attenuate concerns about migration selectivity.

Our analysis is limited to women who were in marital unions, formalized (typically through bridewealth payment) or not, at the time of data collection (N=1,798). The outcome of interest is the woman's current employment outside subsistence agriculture. This variable was generated from respondents' answers to the question on whether they performed any activity with an intention to earn money or receive products or goods, in addition to or instead of their work in their family field. The variable takes the value of '1' if the respondent reported any such activity and '0' if otherwise. It is likely that at least some respondents chose not to report activities that they deemed insignificant or occasional, and our outcome variable, therefore, tends to capture more or less regular employment that yields consistent, even if still paltry, income. Notably, the vast majority (96.5 per cent) of respondents who reported such an activity in the past month also reported performing the same activity throughout much of the interview year.

Pursuant to our first three hypotheses, we formulate three predictors describing husband's migration status and experience. The first predictor is husband's migration status at the time of survey. It is a dichotomy, with the value of '1' for respondents whose husbands were employed outside the community of residence (mainly in South Africa and to a much lesser extent in Mozambique's capital Maputo). The second predictor is the number of years that the current husband was a labor migrant in the six years preceding the survey (or since the year in which the current marital union started if it started less than six years before the survey), regardless of his current migration status. The third predictor is a measure of the economic success of husband's migration. It is operationalized as a set of dummy variables based on frequency of reported cash transfers (either through remittances or in-person handover) that respondents received from their migrant husbands in the twelve months preceding the survey interview (we do not consider the exact amounts of cash remittances or noncash transfers, such as furniture, appliances, clothes, gifts, etc., that a migrant might bring or send to his wife or other family members, as such transfers are very difficult to measure reliably). We distinguish three categories of migrants' wives: those who reported receiving money from their husbands frequently (four times or more); those who received money occasionally (one to three times); and those who did not receive any money from their migrant husbands during the past twelve months. While the cutoff points in this classification are somewhat arbitrary, they reflect general variations in the flow of remittances, especially when exact amounts and numbers of transfers may not be accurately reported.

We fit a series of multivariate binomial logistic regressions predicting the likelihood of woman's current employment as the outcome. We start with three models that each includes one of the above predictors. In these models, we use all women with nonmigrant husbands as the reference category. Then, to test our last set of hypotheses (H4a and H4b), we fit a model that not only subdivides migrants' wives by the reported frequency of financial transfers but also breaks down the nonmigrant subsample by husband's employment status.

The models include several individual- and household-level covariates that are likely to affect women's employment. First, we control for woman's age. To account for childcare burden, we control for the number of respondent's coresident biological children under the age of five years, that is, the age range when children require most intensive care, by using a set of dummy variables: no children under five years of age, one child, and two or three children (we do not consider nonbiological children living in the household as it is often difficult to ascertain the degree of respondent's responsibility for their care). The models also include a dichotomous measure of self-rated health (good vs. average or bad). Women's education is a continuous variable representing the number of years of

completed schooling. We include two dichotomous control variables to define marital union—whether or not at least some bridewealth was paid (i.e. the degree of union formalization) and whether the union is monogamous or polygynous. Next, we control for several characteristics of respondents' households. Household material conditions are approximated with a scale based on the possession of several household items (radio, television set, telephone, refrigerator, bed with a mattress, bicycle, motorcycle, automobile, plow, and water cistern). We also control for the size of household agricultural land per adult household member and the number of household members older than 15 years (excluding the respondent and her husband) who were generating any income at the time of the survey. Finally, as a proxy for labor market opportunities outside subsistence farming, we include household's Euclidean distance in kilometers from the nearest town. The distributions of the outcome, predictor, and control variables are shown in Table 1.

Because observations are clustered within villages, respondents in the same village are likely to share some characteristics that we cannot directly estimate. To account for this unmeasured village-level variability, we estimate two-level models with a random intercept at the village level.

#### 6. Results

### 6.1 Descriptive results

As Table 1 shows, in all, 32 per cent of the survey respondents reported some kind of regular activity aimed at generating returns in money or kind. The largest share of the working women, 46.7 per cent, was employed in petty commerce, followed by farm work remunerated in cash or in harvest share (28.1 per cent). Among other common occupations were making charcoal or gathering firewood (7.6 per cent) and making alcoholic beverages (6.9 per cent). Other, less frequent occupations included road cleaning (in government- or NGO-funded projects), cooking, doing small crafts, and hairdressing, among others. Working wives of migrants and of nonmigrants had generally similar occupational distributions, with somewhat higher shares of those in sales and beverage making among the former and higher shares of those in paid agriculture and in firewood gathering/charcoal pyrolysis among the latter.

Table 2 shows the percentage of women reporting employment in the month preceding the survey by husband's migration and work status. Overall, migrants' wives had a lower level of employment than nonmigrants' wives. The share of working women tended to decrease as the duration of husband's migration increases. When we break the migrant wives' subsample down by the frequency of remittances, we see a particularly strong contrast between wives of migrants who did not remit at all and those who remitted one to three times a year (the middle category). Among women married to frequent remitters (four or more times a year), the share of those employed was somewhat higher than in the middle category. Table 2 also shows the percentages of those employed among wives of nonmigrants. Contrary to what we predicted, women married to employed nonmigrants had by far the highest employment rate; in comparison, the employment rate of women married to nonworking nonmigrants was almost identical to that of wives of migrants.

#### 1020 . V. AGADJANIAN ET AL.

Table 1. Variable distribution, 'MMWL', Gaza Province, Mozambique

Variables	Mean	SD
Woman works outside subsistence agriculture	0.32	0.47
Husband is a current migrant	0.46	0.50
Number of years husband was a migrant in past six years	3.39	2.64
Husband is a migrant, no transfers	0.12	0.32
Husband is a migrant, one to three transfers/year	0.19	0.39
Husband is a migrant, more than four transfers/year	0.15	0.36
Husband is not a migrant and working	0.29	0.45
Husband is not a migrant and not working	0.25	0.43
Woman's age	32.70	6.14
No coresident biological children under five	0.22	0.42
One coresident biological child under five	0.47	0.50
Two to three coresident biological children under five	0.34	0.47
Woman's education (in years)	3.02	2.46
Bridewealth paid in full or partially [no bridewealth paid]	0.48	0.50
Woman is in polygynous union [in monogamous union]	0.26	0.44
Woman considers her general health to be good [considers her health to be average/bad]	0.75	0.43
Number of other employed household members	0.71	1.04
Farmed land size per adult household member (in ha)	0.52	0.42
Household material assets scale	2.30	3.55
Distance from residence to nearest town	22.95	15.17

Notes: Women in marital unions; omitted categories in square brackets.

#### 6.2 Multivariate results

Table 3 displays the results of the multivariate logistic regression models (parameter estimates, standard errors, and corresponding odds ratios). In the first model of Table 3 (section A), we test Hypothesis 1 by comparing all current migrants' wives with all wives of nonmigrants. The sign of the predictor's coefficient suggests a negative effect of husband's migration on the likelihood of wife's employment. However, net of other factors, this effect is only marginally significant (p < 0.06), thus offering only qualified support to Hypothesis 1. In the next model of Table 3 (section B), instead of husband's current migration status, we use the number of years spent by husband in labor migration in the six years preceding the survey. The negative effect of this predictor is now statistically significant at the conventional level (p < 0.05): each additional year of a man's employment outside the community of residence is associated with a 4 per cent decrease in the odds of his wife's working outside substance agriculture (OR = 0.96). This result supports Hypothesis 2. In the next model of Table 3 (section C), we test Hypothesis 3 by breaking

Table 2. Woman's participation in remunerated employment by husband's migration and employment characteristics, per cent of currently married women. 'MMWL', Gaza Province, Mozambique

Husband's characteristics	Per cent employed
Husband's current migration status	
Husband is currently a migrant	28.7
Husband is currently not a migrant	34.8
Cumulative duration of husband's migration	
Husband was never a migrant in past six years	36.4
Husband was a migrant for one to four years in past six years	33.5
Husband was a migrant for five to six years in past six years	29.2
Husband's migration status by financial return from migration	
Husband is a migrant who did not transfer money in past 12 months	32.6
Husband is a migrant who transferred money one to three times in past 12 months	26.0
Husband is a migrant who transferred money more than four times in past 12 months	28.9
Nonmigrant husband's employment	
Husband is currently not a migrant, employed	41.7
Husband is currently not a migrant, not employed	28.9
All	32.0

down the subsample of migrants' wives according to frequency of remittances and comparing the three categories of migrants' wives with wives of nonmigrants. The results generally point to the predicted pattern, but interestingly, the difference from wives' of nonmigrants is statistically significant only for women who received only occasional transfers from their migrant husbands. Hypothesis 3 is therefore only partially supported.

The last model presented in Table 3 (section D) tests Hypotheses 4a and 4b. The model includes the same covariates as the model in section C, except that the wives of nonmigrant husbands are now disaggregated based on whether or not those husbands were engaged in local employment. Women whose nonmigrant husbands were employed at the time of survey are the reference category. The model confirms the stark contrast between the two subgroups of nonmigrants' wives that first transpired in the descriptive exploration: the odds of working among the wives of nonemployed men are more than 40 per cent lower than those among the wives of employed ones (OR = 0.59; p < 0.01). Most interestingly, however, women married to locally employed men are also different from those married to labor migrants. Contradicting Hypothesis 4a, migrants' wives are significantly less likely to be employed outside subsistence farming than are wives of locally working men, and this difference is statistically significant, regardless of the amount of transfers that migrants'

parameter estimates, standard errors, and odds ratios, 'MMWL', Gaza Province, Mozambique	'MMWL', Ga	za Pro	vince,	Mozambio	ne						1	
Covariates		A			В			С			D	
	В	SE	OR	В	SE	OR	В	SE	OR	В	SE	OR
Husband is a migrant	$-0.20^{*}$	0.11	0.82									
Number of years husband was a migrant in past six years				-0.04*	0.02	0.96						
Husband is a migrant, no transfers							-0.07	0.17	0.93	-0.35*	0.18	0.70
Husband is a migrant, one to three transfers per							-0.31*	0.15	0.73	-0.60**	0.16	0.55
year												
Husband is a migrant, more than four transfers							-0.18	0.16	0.84	-0.46**	0.17	0.63
per year												
[Husband is not a migrant]	0.00		1.00				0.00		1.00			
Husband is not a migrant and not working										-0.53**	0.14	0.59
[Husband is not a migrant and working]										0.00		1.00
Woman's age	0.03**	0.01	1.03	0.03**	0.01	1.03	0.03**	0.01	1.03	0.03**	0.01	1.03
[No coresident biological children under five]												
One coresident biological child under five	-0.07	0.13	0.93	-0.07	0.13	0.93	-0.07	0.13	0.93	-0.08	0.14	0.93
Two to three coresident biological children under five	-0.40**	0.15	0.67	-0.40**	0.15	0.67	-0.40**	0.15	0.67	-0.43**	0.15	0.65
Woman's education (in years)	0.05*	0.02	1.05	0.05*	0.02	1.05	0.05*	0.02	1.05	0.05*	0.02	1.05
Bridewealth paid in full or partially	-0.29**	0.11	0.75	-0.27*	0.11	0.76	-0.28**	0.11	0.75	$-0.26^{*}$	0.11	0.77
[No bridewealth paid]												

(continued)

Table 3. Continued

Covariates		Α			В			C			D	
	В	SE	OR	В	SE	OR	В	SE	OR	В	SE	OR
Woman is in polygynous union [Woman is in monogamous union]	0.12	0.12	0.12 1.13	0.11	0.12	0.12 1.12	0.11	0.12 1.12	1.12	60.0	0.12 1.09	1.09
Woman considers her general health to be good [Woman considers her health to be average/bad]	0.14	0.12	0.12 1.15	0.15	0.12	0.12 1.16	0.14	0.12 1.15	1.15	0.11	0.12 1.12	1.12
Number of other employed household members	-0.01	0.05	0.05 0.99	-0.01	0.05	0.05 0.99	-0.01	0.05 0.99	0.99	-0.01	0.05 0.99	0.9
Farmed land size per adult household member	0.10	0.12	1.10	0.10	0.12	1.11	0.10	0.12	1.11	0.08	0.12	1.09
Household material assets scale	-0.01	0.02	66.0	-0.00	0.02	1.00	-0.00	0.02	1.00	-0.01	0.02	0.99
Distance to nearest town (km)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Intercept (level 1)	-1.73	0.41		-1.65	0.42		-1.74	0.42		-1.38	0.43	
Intercept (level 2)	0.08	0.04		0.08	0.04		0.08	0.04		0.07	0.04	
Chi-square	1765.87			1765.14			1765.95			1768.48		
Number of cases	1798			1798			1798			1798		

Notes. Women in marital unions; reference categories in square brackets. Significance levels: \*\*p<0.01; \*p<0.05; †p<0.10.

wives receive from their husbands. At the same time, again contrary to what Hypothesis 4b predicted, when we compare migrants' wives to women married to nonemployed men, no significant differences are present for migrants' wives as whole or for any subcategories of migrants' wives (the results of this model are not shown but are available upon request).

The effects of other covariates also merit mentioning. Thus, the probability of employment shows a positive association with woman's age but a negative relationship with the number of her coresident small children. It also increases with her education. Interestingly, the probability of being employed is significantly lower among women whose marriage has been formalized through bridewealth payment. While this intriguing result calls for a special inquiry that lies outside the scope of our study, we can tentatively propose that such an inquiry should look into the dynamic interconnection of marital union type with women's autonomy and economic security. No other predictors, including woman's self-rated health or the household characteristics, show significant association with the likelihood of woman's employment outside subsistence agriculture.

## 7. Discussion and conclusion

The extensive scholarship on the effects of labor migration on nonmigrant household members' labor force participation not only tends to conclude that these effects are negative but also points to considerable variations across different sending settings and different categories of nonmigrating household members. The results of our analyses add to this scholarship by illustrating the importance of different conceptualizations of men's labor migration for the understanding of its association with their wives' employment outside subsistence farming. Of course, with the data in hand, one cannot ascertain any causal directions and pathways between husband's migration and wife's employment. However, although it is conceivable that women's employment may somehow influence men's migration behavior, in this and other similar patriarchal migrant-sending settings, where men's migration is the norm and where men's choices and preferences dominate family's economic strategies and decisions, this influence is very unlikely.

Whereas a simple current migrant vs. nonmigrant comparison may not be fully informative, attention to migration duration and to diversity of migration outcomes proves quite illuminating. Thus, while the difference between current migrants' and nonmigrants' wives was only marginally significant and therefore should be interpreted with caution, the negative association of the duration of husband's migration with wife's employment was significant at the conventional level and suggests that the impact of migration may indeed accumulate over time (cf. Agadjanian and Sevoyan 2014). Interestingly, however, while studies typically attribute the negative association of migration with nonmigrants' employment to the effects of remittances, our analysis did not produce evidence of a linear relationship between the frequency of migrant financial transfers and the likelihood of nonmigrating women's employment: only women receiving occasional transfers from their migrant husbands were significantly different from nonmigrants' wives. Although this pattern requires further investigation with specialized data, we speculate that it may reflect countervailing effects of migrant transfers: initial or moderate transfers may supply migrants' wives with funds for productive investments but a continuing increase in the

amount of transfers may help satisfy the financial needs of the sending households, thus reducing incentives for local employment. The fact that employed migrants' wives are more likely to engage in petty commerce or brewing alcohol, that is, ventures that may require at least some initial investment, than employed wives' of nonmigrants is also consistent with this speculation.

While the first part of our analysis, guided by Hypotheses 1, 2, and 3, stresses potential consequences of variations in the duration or quality of husband's migration experience, its second part (Hypotheses H4a and H4b) forcefully points to the importance of diversity of employment patterns among nonmigrant men and their marital partners. Our results show that the likelihood of employment among women married to locally employed men is so starkly higher than among both wives of migrants, regardless of migration's economic returns, and wives of not employed nonmigrants. This finding challenges the widely held assumption that in traditional low-income patriarchal settings the income generated by a man's work, either in the community or outside of it, discourages his wife's employment by enhancing the household's economic security and strengthening the wife's dependence on her husband. We propose that explanations for this apparent puzzle should be sought in the nature of local remunerated employment, as well as the nature of labor migration. In a sub-Saharan setting like rural southern Mozambique, work in subsistence agriculture and labor out-migration are both traditional male employment options; men engage in both as part of family strategies to sustain the economic and social reproduction of the household, which is grounded in traditional gendered division of labor. In comparison, local nonsubsistence employment is a historically novel alternative that may indirectly—or even explicitly challenge the traditional gendered role expectations and allocations. As in the case of labor migration or subsistence farming, it seems plausible to think of women's nonagricultural employment as part of a coordinated household strategy. Thus, men's disengagement, however partial, from their agricultural tasks, either by migrating or by opting for local nonfarming work, cannot be fully compensated for by women's increased farming effort due to the earlier mentioned gendered specialization in farming and related subsistence activities. Hence, when employment outside subsistence agriculture becomes an option, both spouses are more likely to pursue it either through a joint family project or independent ventures. Of course, it is important to keep in mind that in rural resource-limited settings, where nonfarming income-generating labor market opportunities are chronically scarce and meagerly rewarding (de Janvry and Sadoulet 2001; Lanjouw and Lanjouw 2001), women's nonagricultural employment does not necessarily connote a drastic improvement in women's and their families' economic well-being; instead, women's entry into the local labor market, much like that of men, is often a reluctant, and at times unsuccessful, attempt to compensate for unstable or declining returns from subsistence farming or to find an alternative to the increasingly unpredictable and socially and psychologically taxing migration option (cf. De Haas and Van Rooij 2010). Of course, the migration option, provided that it translates to a flow of remittances (or at least a promise thereof), may still allow migrants' families to get by even with diminished agricultural labor input due to husband's absence and therefore may disincentivize migrants' wives from venturing into activities outside subsistence farming. In addition, as Menjívar (2011) and Menjívar and Agadjanian (2007) argued, some migrants' opposition to their wives' work, both on economic and socio-normative grounds, may further hinder those women's entry into gainful

employment. Notably, by discouraging women's nonagricultural work and thus reaffirming the traditional gendered division of productive labor, men's migration does not necessarily constrain women's decision-making choices and autonomy in other spheres. In fact, as Yabiku, Agadjanian and Sevoyan (2010) showed in the analysis of an earlier wave of the MMWL data, a man's migration status has a net positive association with his wife's autonomy. However, their analysis also suggests that this association between husband's migration and wife's autonomy is not related to wife's nonagricultural employment. More research, especially of qualitative nature, is needed, to fully understand the interplay of economic rationality with gendered power dynamics in shaping migrants' wives employment options and decisions.

Several limitations of our study must be acknowledged. Although we are able to reliably reconstruct trajectories and economic outcomes of migration, we cannot fully account for initial selection into migration: even in settings where migration is a default expectation for all males, some of them do not migrate, and like the decisions to migrate, the decisions not to migrate may be shaped by gendered negotiation and bargaining (cf. Nobles and McKelvey 2015). While documenting potential implications of these processes, we cannot reconstruct their causal mechanisms. Likewise, we assume that in the process of family negotiation and bargaining, men exercise disproportional initiative and power. Yet, this does not mean that women cannot engage in remunerated employment unless their husbands do: almost three of 10 women married to nonemployed men in our sample were working outside subsistence farming. Again, additional exploration of the couple employment decision-making process, preferably engaging qualitative data, would be necessary to examine and interpret this variation. It is also important to note that local employment for both men and women may follow the cessation of male migration, either successful or unsuccessful. Employment preferences and choices may also be affected by other factors that we cannot fully measure with our data, such as productivity of agricultural land, availability and accessibility of viable labor market alternatives, or health status of household members. Finally, despite the effort to distinguish between regular and occasional work in the survey, most local employment outside subsistence farming, especially among women, is informal and varies in consistency and intensity depending on season, opportunities, and individual or household conditions and circumstances. These variations may blur the distinction between self-defined 'working' and 'not working' statuses. We believe, however, that our definition captured more systematic labor market participation.

These constraints and caveats notwithstanding, our study makes an important contribution to the migration and development scholarship by emphasizing the intrinsic and consequential gendered interconnections between local and extra-local employment opportunities and choices in sub-Saharan and similar resource-limited contexts. It also informs our understanding of social and economic changes in such contexts. In societies where labor migration has continued for generations, decisions to migrate may not have as transformative an impact as decisions to stay and instead to pursue local livelihood options. Although more specialized data are needed to fully grasp the complex contingencies and scenarios of migration versus nonmigration decision-making and of its association with and implications for marital partners' employment opportunities and choices, our study offers useful guidance for such future endeavors.

## **Acknowledgments**

Support of the UCLA California Center for Population Research (NICHD P2C-HD041022) and of the Ohio State University Institute for Population Research (NICHD P2C-HD058484) is acknowledged.

## **Funding**

Data collection for this study was supported by Eunice Kennedy Shriver National Institute of Child Health and Human Development, USA [R01HD058365 V.A. principal investigator].

Conflict of interest statement. None declared.

## References

- Acosta, P. (2006) Labor Supply, School Attendance and Remittances from International Migration: The Case of El Salvador. Washington, D.C.: World Bank.
- Acosta, P. A., Lartey, E. K. K. and Mandelman, F. S. (2009) 'Remittances and the Dutch Disease', Journal of International Economics, 79/1: 102-16.
- Agadjanian, V., Arnaldo, C. and Cau, B. (2011) 'Health Costs of Wealth Gains: Labor Migration and Perceptions of HIV/AIDS Risks in Mozambique', Social Forces, 89/4: 1097-118.
- and Hayford, S. R. (2018) 'Labor Migration and Marital Dissolution in Rural Mozambique', Journal of Family Issues, 39/5: 1236-57.
- Yabiku, S. T. and Cau, B. (2011) 'Men's Migration and Women's Fertility in Rural Mozambique', Demography, 48/3: 1029-48.
- —— and Sevoyan, A. (2014) 'Embedding or Uprooting? The Effects of International Labor Migration on Rural Households in Armenia', International Migration, 52/5: 29-46.
- Amuedo-Dorantes, C. and Pozo, S. (2006) 'Migration, Remittances, and Male and Female Employment Patterns', American Economic Review, 96/2: 222-6.
- Arias, P. (2013) 'International Migration and Familial Change in Communities of Origin: Transformation and Resistance', Annual Review of Sociology, 39/1: 429-50.
- Aysa, M. and Massey, D. S. (2004) 'Wives Left Behind: The Labor Market Behavior of Women in Migrant Communities', in Durand, J. and Massey, D. S. (eds) Crossing the Border: Research from the Mexican Migration Project, pp. 131-44. New York: Russell Sage Foundation.
- Becker, G. S. (1981) A Treatise on the Family. Cambridge, MA: Harvard University Press. Binzel, C. and Assaad, R. (2011) 'Egyptian Men Working Abroad: Labour Supply Responses by the Women Left Behind', Labour Economics, 18: S98-114.
- Chami, R. et al.. (2011) Macroeconomic Consequences of Remittances. Washington, D.C.: International Monetary Fund, Occasional Paper 259.

- Cox-Edwards, A. and Rodríguez-Oreggia, E. (2009) 'Remittances and Labor Force Participation in Mexico: An Analysis Using Propensity Score Matching', *World Development*, 37/5: 1004–14.
- De Haas, H. and Van Rooij, A. (2010) 'Migration as Emancipation? the Impact of Internal and International Migration on the Position of Women Left behind in Rural Morocco', Oxford Development Studies, 38/1: 43–62.
- de Janvry, A. and Sadoulet, E. (2001) 'Income Strategies among Rural Households in Mexico: The Role of Off-farm Activities', *World Development*, 29/3: 467–80.
- de Vletter, F. (2007) 'Migration and Development in Mozambique: Poverty, Inequality and Survival', *Development Southern Africa*, 24/1: 137–53.
- Démurger, S. and Li, S. (2013) 'Migration, Remittances, and Rural Employment Patterns: Evidence from China', in Giulietti, C., Tatsiramos, K. and Zimmermann, K. F. (eds) *Labor Market Issues in China*, pp. 31–63. Bingley, UK: Emerald Group Publishing Limited.
- Dodson, B. (2000) 'Women on the Move: Gender and Cross-Border Migration to South Africa from Lesotho, Mozambique and Zimbabwe', in McDonald, D. A. (ed.) *On Borders: Perspectives on International Migration in Southern Africa*, pp. 119–50. New York: St. Martin's Press.
- Funkhouser, E. (2006) 'The Effect of Emigration on the Labor Market Outcomes of Sender Household: A Longitudinal Approach Using Data from Nicaragua', *Well-Being and Social Policy*, 2/2: 5–25.
- Grigorian, D. A. and Melkonyan, T. A. (2011) 'Destined to Receive: The Impact of Remittances on Household Decisions in Armenia', *Review of Development Economics*, 15/1: 139–53.
- Haddad, L., Hoddinott, J. and Alderman, H., eds (1997) Intrahousehold Resource Allocation in Developing Countries: Models, Methods and Policies. Baltimore: Johns Hopkins University Press.
- INE (Instituto Nacional de Estatística) (2017) Divulgação de resultados preliminares: IV RGPH 2017 [Dissemination of preliminary results: IV Population Census 2017]. Instituto Nacional de Estatística [in Portuguese].
- Itzigsohn, J. (1995) 'Migrant Remittances, Labor Markets, and Household Strategies: A Comparative Analysis of Low-Income Household Strategies in the Caribbean Basin', Social Forces, 74/2: 633–55.
- Jackman, M. (2014) 'A Note on the Labor Market Effects of Remittances in Latin American and Caribbean Countries: Do Thresholds Exist?', The Developing Economies, 52/1: 52–67.
- Justino, P. and Shemyakina, O. N. (2012) 'Remittances and Labor Supply in Post-conflict Tajikistan', *IZA Journal of Labor and Development*, 1/1: 1–28.
- Khan, M. I. and Valatheeswaran, C. (2016) 'International Migration, Remittances and Labour Force Participation of Left-behind Family Members: A Study of Kerala', *Margin: The Journal of Applied Economic Research*, 10/1: 86–118.
- Kim, N. (2007) The Impact of Remittances on Labor Supply: The Case of Jamaica. Washington, D.C.: World Bank, World Bank Policy Research Working Paper No. 4120.
- Lanjouw, J. and Lanjouw, P. (2001) 'The Rural Nonfarm Sector: Issues and Evidence from Developing Countries', *Agricultural Economics*, 26/1: 1–23.

- Lokshin, M. and Glinskaya, E. (2009) 'The Effect of Male Migration on Employment Patterns of Women in Nepal', The World Bank Economic Review, 23/3: 481-507.
- López-Feldman, A. and Escalona, D. (2017) 'Remittances and Labour Allocation Decisions at Communities of Origin: The Case of Rural Mexico', Applied Economics Letters, 24/4: 238-42.
- Lundberg, S. and Pollak, R. A. (1994) 'Noncooperative Bargaining Models of Marriage', American Economic Review, 84/2: 132-7.
- Maharjan, A., Bauer, S. and Knerr, B. (2012) 'Do Rural Women Who Stay Behind Benefit from Male Out-Migration? A Case Study in the Hills of Nepal', Gender, Technology and Development, 16/1: 95-123.
- Mendola, M. and Carletto, C. (2012) 'Migration and Gender Differences in the Home Labour Market: Evidence from Albania', Labour Economics, 19/6: 870-80.
- Menjívar, C. (2011) Enduring Violence: Ladina Women's Lives in Guatemala. Berkeley, California: University of California Press.
- and Agadjanian, V. (2007) 'Men's Migration and Women's Lives: Views from Rural Armenia and Guatemala', Social Science Quarterly, 88/5: 1243-62.
- Mu, R. and van de Walle, D. (2011) 'Left Behind to Farm? Women's Labor Re-allocation in Rural China', Labour Economics, 18: S83-97.
- Mughal, M. and Makhlouf, F. (2013) 'Labour Effects of Foreign and Domestic Remittances: Evidence from Pakistan', International Review of Applied Economics, 27/ 6: 798-821.
- Nobles, J. and McKelvey, C. (2015) 'Gender, Power, and Emigration from Mexico', Demography, 52/5: 1573-600.
- Rodriguez, E. R. and Tiongson, E. R. (2001) 'Temporary Migration Overseas and Household Labor Supply: Evidence from Urban Philippines', International Migration Review, 35/3: 709-25.
- Stark, O. (1991) The Migration of Labor. Cambridge, MA: Basil Blackwell.
- and Lucas, R. E. B. (1988) 'Migration, Remittances, and the Family', Economic Development and Cultural Change, 36/3: 465-81.
- Urama, N. E. et al. (2017) 'International Migrant Remittances and Labour Supply in Nigeria', International Migration, 55/1: 37-50.
- World Bank (2006) The Development Impact of Workers' Remittances in Latin America. Washington, D.C.: World Bank.
- (2019) World Bank Country Data: Mozambique, 2017. Washington, D.C.: World Bank <a href="https://data.worldbank.org/country/mozambique">https://data.worldbank.org/country/mozambique</a> accessed 20 Sep 2019.
- Wouterse, F. and Taylor, J. E. (2008) 'Migration and Income Diversification: Evidence from Burkina Faso', World Development, 36/4: 625-40.
- Yabiku, S. T. and Agadjanian, V. (2017) 'Father's Labor Migration and Children's School Discontinuation in Rural Mozambique', International Migration, 55/4: 188-202.
- -, and Cau, B. (2012) 'Labor Migration and Child Mortality in Mozambique', Social Science & Medicine, 75/12: 2530-9.
- —, and Sevoyan, A. (2010) 'Husbands' Labor Migration and Wives' Autonomy', Population Studies, 64/3: 293-306.
- Zachariah, K. C., Mathew, E. T. and Irudaya, R. S. (2001) 'Social Economic and Demographic Consequences of Migration on Kerala', International Migration, 39/2: 43-68.