Men's Migration, Women's Autonomy, and Union Dissolution in rural Mozambique*

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Abstract

The study brings together two bodies of literature—on the consequences of labor migration for sending areas and on factors causing union dissolution—and employs unique longitudinal data from rural Mozambique, a rapidly changing setting with massive yet diverse male labor out-migration, to examine the effects of men's migration on union dissolution and the role of women's decision-making autonomy in this causal relationship. The analysis detect no overall influence of husband's migration status on the likelihood of union dissolution, but the lack of overall influence conceals substantial differences in the rates of dissolution between unions of more successful and less successful migrants. While women's decision-making autonomy does not mediate the effect of migration on union dissolution, it does moderate this effect in significant and instructive ways. Implications of these results for trends in union stability in sub-Saharan and other settings of rapid social change are discussed.

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Introduction

Although rates of union dissolution have varied considerably throughout the developing world, the social factors that influence them have been fairly consistent across national contexts. As in more developed settings (e.g., Bumpass et al. 2009; Ono 2006; Ruggles 1997), these factors have to do primarily with changing positions and roles of women in society, and in particular with women's education and labor force participation, which transform gender and marital norms, expectations, and relationships (Goode 1993; Reniers 2003; Takyi and Broughton 2006). Yet increase in women's social and economic independence does not necessarily lead to higher divorce rates: in fact, where improvements in women's status result in a decline of early and arranged marriages, divorce rates actually drop because such marriages are most likely to end in divorce (Jones 1997; Heaton, Cammack, and Young, 2001; Yi et al., 2002; Yi and Deqing, 2000). However, in rigidly patrilineal settings divorce rates remain low because remarriage or reintegration of divorced women into their natal families is difficult even for relatively well-educated and economically independent women (Das Gupta 2010). As Takyi and Gyimah (2007) showed for Ghana, the risk of divorce was significantly higher in settings with matrlineal than patrilineal kinship systems as former typically offer women greater freedom and autonomy. Finally, the effect of women's status on union stability has a complex relationship with religion. Thus because getting a divorce is relatively easy under Islamic family law (the Sharia), and divorce rates have been generally higher in many Muslim settings (Jesmin and Salway, 2000; Jones 1997) despite the common assumption that Muslim women have less freedom and autonomy than their non-Muslim counterparts.

Given the massive and rising volume of population movement and its connections with broader social change throughout the world (Portes 2010), research on factors associated with marital stability in developing settings must take migration into account. The migration literature has

examined a variety of marital and family outcomes of migration. Specifically, this literature points to connections between migration and union dissolution. Thus Landale and Ogena (1995) reported higher rates of union dissolution among Puerto Rican women with migration experience in the U.S., compared to women without such experience. Migration was found to raise the risks of union dissolution in European settings (Boyle et al. 2008; Muszynska and Kulu 2008). Frank and Wildsmith (2004) concluded that US-bound labor migration significantly increases the risks of union dissolution in Mexico. They also found that the likelihood of union dissolution varies across Mexican communities with different levels of out-migration.

While these studies usually point to the strain that migration bring into spousal relationships, the exact mechanisms of the influence of migration on marital stability are still not well understood, especially in developing settings where male labor migration is a well-established part of household and community reproduction. In particular, it remains unclear how migration is related to changes in gender relations and women's status, which, as the general literature on union dissolution suggests, are key factors shaping marital outcomes. In this paper, we use unique longitudinal data to examine the link between male labor migration and union dissolution in one such setting—rural southern Mozambique. We integrate women's decision-making autonomy into the analysis as both a possible mechanism explaining associations between migration and divorce and a possible moderator of the association. In addition, instead of treating all migrants equally, we use a more nuanced measure of migration that accounts for variation in the economic effects of men's migration on their left-behind household members.

Conceptual framework and hypotheses

Our conceptual framework brings together the literature on the consequences of migration for marital stability and the literature on the impact of female empowerment and autonomy on union

dissolution. At the same time, it grounds gender and marital dynamics in the context of a rapidly changing migration landscape of places like rural Mozambique, where migration outcomes for both migrants and their left-behind families are increasingly diversified. Because labor migration entails frequent and prolonged separations of spouses and because during such separations both spouses, but especially husbands, may establish alternative partnerships, we hypothesize that migration, all things being equal, should increase the likelihood of marital dissolution. At the same time, guided by the findings of our earlier research (Agadjanian, Arnaldo, and Cau 2011; Agadjanian, Yabiku, and Cau 2011), we also expect the effect of migration on the strength of the marital bond to vary according to migration success. Importantly, the success of migration is defined from the standpoint of the non-migrant household members: a successful migrant is not one who finds a better job and commands higher income at the place of migration destination but one who brings or sends a large share of that income home. Accordingly, a migrant who earns well may be seen as less successful by his wife and other dependents than those who make only a meager income if he is not delivering on the promise that spurred his migration in the first place—to provide a continuous flow of resources for those left behind. We anticipate that marital unions involving migrants who are not successful providers will be more susceptible to dissolution than unions in which husbands are more successful migrants.

Our previous research has shown that husbands' migration tends to strengthen their wives' decision-making autonomy (Yabiku et al. 2010). Women's autonomy may be one of the mechanisms through which migration raises the likelihood of divorce or separation. That is, as migrants' wives gain greater decision-making power, they may be more likely to use this power to end their marriages. We therefore hypothesize that the addition of autonomy to the model should decrease the direct effect of migration on marital dissolution. Yet, autonomy may not only mediate but also moderate the effect of migration on union stability. Specifically, we

anticipate that women's autonomy will have a stronger influence on the probability of dissolution of migrants' unions than of non-migrants' unions. Finally, if an effect of autonomy on the dissolution of migrants' unions is found, we also want to explore whether this effect differs between women married to more successful migrants and women married to less successful migrants.

Data and method

The data used in this study were collected in rural areas of southern Mozambique's Gaza province. These areas are traditionally patrilineal and are characterized by low-yield subsistence agriculture and high levels of male labor out-migration. This migration, historically directed toward the mining centers in South Africa, has undergone considerable changes in the past two decades. Once a source of secure formal employment for Mozambican miners, it now contains an increasing share of informally and illegally employed men, whose jobs and incomes are insecure and unpredictable.

The data come from a longitudinal survey carried out in 56 villages randomly selected from four districts of Gaza province. In the first wave of the survey, conducted in the middle of 2006, 1680 women in marital union aged 18-40 (30 per village) were interviewed. It should be noted that the notion of marriage in this setting is fluid and its complete formalization even within the customary, bridewealth-based system, is a prolonged process (cf. Meekers 1992). Because of this fluidity, an inclusive definition of marital union was applied in the survey: any woman who, in her own words, had a husband, was considered to be in a marital union regardless of whether that union was a customary (bridewealth-based) or legal marriage or whether it was what in the western context is usually referred to as cohabitation. Accordingly, here we use the terms "married" and "being in union" interchangeably.

In each village, the survey sample was designed so as to assure a balanced representation of women married to migrants and non-migrants. The village population was first canvassed to identify households with women married to migrants and women married to non-migrants. Each of the two categories of households constituted a separate sampling frame from which fifteen households were drawn randomly. In each selected household, one woman of eligible age was administered a face-to-face survey covering a variety of sociodemographic and ethnocultural characteristics, experiences, and views. Among other data, the survey collected detailed information on women's and their husbands' work and their husbands' migration (for women married to migrants). A separate module of the survey instrument was devoted to respondents' decision-making autonomy.

Three years later, the same villages and households were revisited for a second wave of interviews. The mid-2009 survey had a similar format and included similar modules. About three-quarters of the 2006 respondents were located in the sampled villages; the rest had moved out, died, or were unavailable for other reasons. For all the women who could not be located, interviews were carried out with a member of the household in which the women had been living in 2006 or other persons who knew the women relatively well; these interviews were aimed in part at reconstructing the women's marital, reproductive, and mobility history. Based on the information obtained from these interviews, two months later a follow-up attempt was made to locate some of the respondents who had moved. Some of the women were located and interviewed but a large part of them could not be found (a substantial number of them had gone to unknown destinations in South Africa). Also, during that follow-up attempt, several women who had been temporarily unavailable at the time of main fieldwork were located and interviewed. About a year later, in the middle of 2010, another attempt to locate the missing

2006 respondents was made; once again, for those respondents who could not be found at this second follow-up, detailed information was gathered from knowledgeable community members.

As a combined result of the three attempts to locate the 2006 respondents or to obtain sufficient details of their post-2006 history, we were able to ascertain through direct observation or reconstruction whether the 2006 union was still intact or ended in divorce or separation by mid-2009 for most respondents. The respondents for whom no reliable information could be obtained are excluded from this analysis. Women who died or whose 2006 husbands died between the two survey waves are also excluded. In all, 105 cases were excluded (of which 72 were women whose husbands died between the two survey waves). To assess the potential impact of excluding these women, we conducted exploratory analyses in which these women were randomly assigned dissolution outcomes. Results from these analyses did not differ substantively from those presented below.

Due to the above-mentioned fluid nature of marriage in the study setting, and correspondingly, the fine line that separates “formal” and “informal” marital unions, we cannot distinguish between “divorce” and “separation” (and in fact, would argue that such a distinction has little heuristic or practical value). The terms “marital dissolution,” “divorce,” and “separation” are therefore used here interchangeably. In some of the interviews with relatives or neighbors, it proved impossible to ascertain directly whether a marital union ended in divorce or separation. In such cases, we use the wife’s change of residence without her husband as a plausible proxy for marital dissolution. Furthermore, in most survey interviews conducted with relatives or neighbors of respondents whose union had dissolved, it was impossible to determine which of the spouses initiated the dissolution. Also, the interviewed relatives or neighbors were asked whether the women in question were married or divorced/separated at the time when they

moved out of the village but not the exact timing (month and year) of divorce/separation (most of the respondents would have been unlikely to remember these details). Besides, marital dissolution, like marriage itself, is not always a discreet event and often is a rather protracted process. We therefore cannot employ survival analysis techniques to assess the monthly or yearly hazards of marital dissolution. Instead, we use logistic regression predicting a dichotomous outcome—whether or not the marital union in which a respondent was in 2006 ended in divorce or separation any time before the middle of 2009. Although admittedly a coarser statistical approach than that offered by event-history analysis, binomial logistic regression is, in our view, sufficiently potent to address our research questions and to test the hypotheses.

The main predictor is husband's migration status as reported in the 2006 survey. To test our hypotheses, we first simply compare women who were married to migrants with women married to non-migrants. Then we subdivide the migrant-husband subsample on the basis on migration success. The definition of more successful vs. less successful migrant is borrowed from our previous work that produced instructive variations across the two categories of migration success in fertility and HIV/AIDS-related views, among other outcomes (Agadjanian, Arnaldo, and Cau, forthcoming; Agadjanian, Yabiku, and Cau, forthcoming). Rather than using an objective definition of migration success, based on the amount or frequency of remittances received by the household, we employ a subjective definition which is derived from a respondent's own assessment of whether the living conditions in her household had improved, worsened, or remained the same as a result of her husband's migration. In these models, husband's migration status is operationalized as a set of dummy variables—more successful migrant (household conditions improved), less successful migrant (household conditions worsened or remained the same), and non-migrant.

The second variable of interest is women's decision-making autonomy. We operationalize autonomy using a scale constructed on the basis of respondents' answers to a battery of questions in the autonomy module of the 2006 questionnaire. The questions were formulated so as to find out whether respondents needed their husbands' or in-laws' (with whom they typically reside in their husbands' absence) permission to visit relatives or friends, travel to the district capital, spend money on family and own needs, work outside the home, use family planning, or take an HIV test. The scale has high internal consistency, with Cronbach's alpha above .80. Following our conceptualization, we intend to examine whether autonomy mediates and/or moderates the effect of migration on marital dissolution. To examine a possible mediating effect, we add the autonomy score to the logistic regression as a covariate. To test for moderation, we add interactions of the autonomy score with the husband's migration status variables.

Individual-, couple-, household-, and village-level characteristics, all measured in 2006, are included in the multivariate models as controls. Thus, the models control for respondent's age, which is expected to have negative association with probability of marital dissolution. The models also control for the number of children, as the presence of children has been shown to decrease the risk of divorce (Fan and Lui, 2004; Lee 2006). Respondent's education and work outside the household are included as markers of her status (as separate from decision-making autonomy); both variables are expected to have a positive relationship with the likelihood of marital dissolution (see Takyi and Broughton 2006). The models also control for whether or not a respondent was affiliated with organized religion (mainly a Christian church in that setting) as religion is typically associated with a lower likelihood of marital dissolution (Lehrer 2004).

Four measures of marital quality and stability are included. The first of them is a dichotomy of whether or not the respondent had been previously in a marital union. Marital unions of women who had earlier marriages are expected to be less stable. The models also control for whether the respondent's marriage was monogamous or polygynous in 2006 because polygynous marriages are more prone to dissolution (Pison 1986). The bridewealth status of the union is operationalized as a dichotomy—at least some bridewealth paid vs. no bridewealth paid. Marriages contracted through bridewealth, which is customarily required but nowadays is often bypassed, are expected to be less likely to dissolve. Another measure that represents the husband-wife relationship, is respondents' worries about getting infected with HIV by their husbands (respondents' HIV status is not available) because HIV can be a major factor in the spouses' decisions to end their unions (Porter et al. 2004; Reniers 2008).

Two measure of household economic status are also used as controls. One is a material possession scale based on household ownership of such consumer items as radio, bicycle, motorcycle, and automobile; the other is cattle ownership (a dichotomy—household owns any vs. none), which is a largely symbolic measure of household wealth and status in that rural society. Another household-based measure that the multivariate models control for is co-residence with in-laws. In addition to the individual- and household-level indicators, the model controls for the levels of male labor migration in the community, which is approximated by the proportion of households with migrant men in the total number of village households as recorded during the pre-survey canvassing. Because the survey respondents were clustered in villages and therefore could share some unobserved characteristics, we employ a random-intercept approach allowing the intercept to vary randomly across villages. The multivariate models are fitted using the GLIMMIX procedure in SAS (SAS 2006).

Descriptive results

Table 1 presents the percentage of 2006 respondents who were divorced or separated by mid-2009 among all respondents for whom this information is available for the entire sample and by husband migration category. Overall, 13.0% of the married women interviewed in 2006 were divorced or separated three years later. The percentage of those divorced/separated was only slightly higher among women married to migrants than women married to non-migrants, 13.3% vs. 12.7%. However, this similarity conceals the contrasting experiences of women married to more successful migrants and those married to less successful migrants: among the latter, the share of those whose unions ended in dissolution was more than double that among the former (8.7% vs. 18.1%). Table 1 also shows the percentage of those divorced/separated by their autonomy score (from 1 to 7). The distribution is U-shaped: the percentage divorced/separated is highest at the lowest end of the autonomy scale, declines as autonomy rises, and then increases again at the highest end of the autonomy scale distribution.

Table 1 about here

Table 2 displays average autonomy scores for respondents whose union ended in divorce/separation and for respondents whose union remained intact in mid-2009 by their husbands' migration status in 2006. Overall, women who would eventually divorce or separate scored slightly lower on the autonomy score that women whose would remain married. However, the gap between the two categories was appreciably large only among women married to non-migrants: non-migrants' wives who found themselves divorced/separated by mid-2009 had had a much lower autonomy score in 2006 than women married to migrants. While the average autonomy scores were identical between women in intact and dissolved unions in the less-successful migrant category, divorced/separated women who had been

married to more successful migrants had a slightly higher mean autonomy score than their counterparts in intact unions (5.1% vs. 4.6%).

Table 2 about here

Multivariate results

Table 3 displays the results of the random intercept logistic regression models predicting divorce or separation by mid-2009 from individual and household characteristics reported in 2006. In the models presented in the table's first three panels (A, B, and C), women married to migrants are compared to women married to non-migrants in 2006 without differentiating between more and less successful migration. The baseline model (husband's migration status as the only predictor) shows that, contrary to our expectation, the likelihood of experiencing marital dissolution does not vary significantly between migrants' and non-migrants' wives. The effect of husband's migration status is very small and all but disappears when controls are added (Panel B). The autonomy score coefficient is negative but is not statistically significant. The models produce no evidence of a mediating effect of autonomy on the likelihood of union dissolution. In the model displayed in Panel C, we add interaction between husband's migration status and wife's autonomy score. The picture changes considerably: both the migration status and the autonomy score main-effect coefficients are now statistically significant, as is the interaction term. The results suggest that being married to a migrant decreases the probability of dissolution at the lowest level of autonomy but as autonomy among migrants' wives rises, the probability of their unions ending in divorce/separation also rises. Looked at from the autonomy perspective, the results suggest that higher autonomy is associated with a lower likelihood of marital dissolution among women married to non-migrants but this effect is tempered among migrants' wives.

Table 3 about here

The other three panels of Table 3 (D, E, and F) display results of the models where migrants' wives are subdivided into two categories based on their husbands' migration success as perceived by women in 2006. In the baseline model, women married to more and less successful migrants find themselves on the opposite ends of the range of marital dissolution likelihood and practically equidistant from women whose husbands were not migrants in 2006. When we add controls, the general pattern persists but the magnitude of the migration coefficients diminishes and they are no longer significant. However, the two migration success categories are significantly different from each other (not shown). The effects of migration success dummies are not affected by the addition of the autonomy score; as in Model B, the effect of autonomy is negative but not statistically significant.

The addition of interactions between migration status categories and autonomy changes the picture. The coefficients for both migration success categories now have a negative sign, but only that for more successful migration is significantly different from zero, suggesting that being married to a more successful migrant significantly decreases the odds of marital dissolution at lower levels of autonomy. However, the increase in autonomy for these women has a countervailing effect on the probability of divorce/separation as it does for women married to less successful migrants. Finally, the main effect of the autonomy score is essentially the same as in Panel B and should be interpreted similarly.

Among other covariates in the multivariate models, several results are noteworthy. Thus being worried about contracting HIV from the husband has a positive effect on the likelihood of marital

dissolution. This covariate shows no significant interaction with husband's migration status (not shown). Being in a polygynous marriage significantly increases the chances of divorce/separation, while being in a union cemented by at least partial transfer of bridewealth is associated with a lower likelihood of marital dissolution. Having being in a marital union before tends to increase the likelihood of divorce (even though the coefficient is only marginally significant). Interestingly, the effect of education, while negative, is not statistically significant. Household material possessions are irrelevant to the dissolution likelihood, but cattle ownership tends to diminish it.

Discussion

The foregoing analysis produced interesting insights into determinants of marital stability in a rural African setting with traditionally high levels of migration but increasing diversity of migration outcomes. It illustrated how male labor migration, once a normative process and a integral part of family life, may become a source of family erosion once it ceases to produce expected economic returns. The divergent effects of more and less successful migration on marital stability largely canceled each other out. However, the analysis also highlighted important connections between men's migration and women's autonomy.

Although we did not find any evidence of autonomy being a mediator between migration and union dissolution, we did detect instructive moderating effects. Specifically, while wife's decision-making autonomy diminished the likelihood of divorce/separation in unions with non-migrant husbands, autonomy of women married to migrants tended to increase the probability of union dissolution. It may be that women married to non-migrant men are able to deploy their decision-making power to effect changes in their husbands' behavior and negotiate their relationships with them so as to maintain and even strengthen their marital bond, while migrant

husbands, because they are absent, are less amenable to change and negotiation. Lower-autonomy migrants' wives were less like to see that marriage dissolve, but the union-strengthening effect of being married to a migrant among lower-autonomy women was largely concentrated among women married to more successful migrants.

Among the limitations of the study, we must single out our inability to ascertain for all the cases of marital dissolution whether divorce/separation was initiated by the wife or the husband. It is also possible that some of the respondents reclassified their status from having a husband to not having one simply based on their perception of the strength of their "marital" bond. This and other limitations notwithstanding, our study provides a valuable illustration of how the changing economic and social parameters of labor migration and gender inequalities affect stability of marital unions. It is also important to see the role of changing migration patterns and returns in the broader context of the dramatic social transformation of Africa's rural communities. Thus trends in marital dissolution are also conditioned on the acceptability of remarriage. While remarriage of widows, usually into polygynous unions, has always been common, remarriage of divorced women, once strongly frowned upon, is also on the rise, especially as the bridewealth requirements in the dissolved marriage were not met. Finally, while viable non-agricultural employment options for women within rural communities remain limited, future research should take into account increasing opportunities for women's own mobility directed to places where such employment options are both abundant and more socially acceptable.

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Table 1. Marital dissolution rates by husband's migration status and wife's autonomy score

Characteristics in 2006	Percent divorced/separated by mid-2009
All	13.0
Husband's migration status	
Husband is not a migrant	12.7
Husband is any migrant	13.3
Husband is a more successful migrant	8.7
Husband is a less successful migrant	18.1
Wife's autonomy score	
1	19.6
2	15.3
3	13.7
4	11.2
5	9.9
6	12.4
7	13.4

Table 2. Average autonomy score (1-7) by husband's migration status in 2006 and divorce/separation status in 2009

	Divorced or separated	Not divorced or separated
All	4.4	4.6
Husband's migration status		
Husband is not a migrant	3.9	4.5
Husband is any migrant	5.0	4.8
Husband is a more successful migrant	5.1	4.6
Husband is a less successful migrant	5.0	5.0

Table 3. Random-intercept logistic regression of marital dissolution

Predictors (all measured in 2006)	A			B			C			D			E			F		
	β	SE		β	SE		β	SE		β	SE		β	SE		β	SE	
Husband is a migrant	0.046	0.152		0.012	0.166		-1.174	0.443	**									
Husband is a more successful migrant										-0.438	0.219	*	-0.364	0.234		-1.777	0.694	**
Husband is a less successful migrant										0.411	0.176	*	0.258	0.189		-0.754	0.514	
Number of children				-0.364	0.069	**	-0.373	0.069	**				-0.363	0.069	**	-0.371	0.070	**
Age 21-25				0.042	0.216		0.054	0.217					0.067	0.217		0.079	0.218	
Age 26-30				-0.499	0.266	+	-0.506	0.267	+				-0.488	0.267	+	-0.495	0.268	+
Age 31 or over				-0.540	0.318	+	-0.529	0.319	+				-0.511	0.319		-0.501	0.320	
Education, 1-4 years				-0.147	0.194		-0.169	0.195					-0.127	0.195		-0.148	0.196	
Education, 5 or more years				-0.348	0.228		-0.329	0.228					-0.322	0.229		-0.305	0.229	
Working outside the home				-0.029	0.197		-0.030	0.198					-0.048	0.198		-0.047	0.199	
At least some bridewealth paid				-0.440	0.187	*	-0.441	0.188	*				-0.393	0.189	*	-0.396	0.190	*
Not first marriage				0.368	0.228		0.392	0.229	+				0.351	0.228		0.374	0.229	+
Polygynous marriage				0.677	0.195	**	0.681	0.196	**				0.646	0.196	**	0.653	0.196	**
Belongs to organized religion				0.180	0.245		0.150	0.246					0.177	0.245		0.149	0.247	
Worried about getting HIV from husband				0.513	0.235	*	0.537	0.236	*				0.514	0.235	*	0.536	0.236	*
Household material possessions scale				-0.089	0.090		-0.088	0.091					-0.074	0.090		-0.074	0.091	
Household owns cattle				-0.359	0.194	+	-0.384	0.195	*				-0.350	0.195	+	-0.376	0.196	+
Co-resident in-laws				-0.112	0.174		-0.077	0.174					-0.114	0.175		-0.080	0.175	
HH with migrants/HH without migrants in village				-0.204	0.159		-0.1926	0.1605					-0.197	0.161		-0.186	0.162	
Decision-making autonomy scale				-0.042	0.042		-0.136	0.053	**				-0.045	0.042		-0.136	0.053	**
Migrant husband*autonomy scale							0.258	0.088	**									
More successful migrant husband*autonomy																0.307	0.134	*
Less successful migrant husband*autonomy																0.221	0.101	*
Intercept	-1.932	0.109	**	-0.5466	0.415		-0.2012	0.428		-1.932	0.109	**	-0.607	0.416		-0.272	0.43	
Number of cases	1568			1568			1568			1568			1568			1568		

Reference categories: Husband is not a migrant; Age 18-20; No education; Not working; No bridewealth paid; First marriage; Monogamous marriage; Does not belong to a religion; Not worried about getting HIV from husband; Household owns no cattle; No co-resident in-laws. Significance levels: + p≤.10; * p≤.05; ** p≤.01.