Gender and migration from Albania

Abstract:
This paper examines the dynamics and causes of the shift in the gender composition of migration, and more particularly, in the access of women to migration opportunities and decision making. Our analysis focuses on Albania, a natural laboratory for studying international migration where out-migration was essentially non-existent from the end of World War II to the end of the 1980s. The authors use micro-level data from the Albania 2005 Living Standards Measurement Study, including migration histories for family members since migration began. Based on discrete-time hazard models, the analysis shows an impressive expansion of female participation in international migration. Female migration, which is shown to be strongly associated with education, wealth, and social capital, appears responsive to economic incentives and constraints. Using information on the dependency of female migration to the household demographic structure as well as the sensitivity of female migration to household-level shocks, the authors show how household level constraints and incentives affects male and female migration differently. Throughout this period, however, women's migration behavior appears more directly aligned with household-level factors and there is little evidence to suggest that increased female migration signals increasing behavioral independence among Albanian women.

1. Introduction

A central feature of the complex relationship between gender and migration is the shifting sex composition of international migration (Castles and Miller 2003; Cerrutti and Massey 2001; Pfeiffer et al. 2007). While women comprise roughly half of the world's international migrant population (Zlotnik 1999), the proportion varies considerably by region, and there are countries, such as Philippines, Sri Lanka, and Indonesia, where the majority of recent emigrants are female (Martin 2007; United Nations 2006). In addition to this variability across societies, there is also a great deal of heterogeneity within societies over time. Whereas in an apparent minority of settings women are active participants from the start, the more common trend is one where migration is primarily male at the onset and then becomes equalized over time (Andall 1992; Kofman 1999). This pattern is particularly valid where most migration is labor-motivated, as in the Mexican case where much of the migration literature is focused, and where women compose an increasingly large share of the migration flow (Cerrutti and Massey 2001; Kanaiaupuni 2000; Massey et al. 1994). Similarly, empirical evidence from the Philippines, where men comprised the majority of migrants for much of the 20th Century, shows that women made up over 60 percent of out-migrants by the mid-90s (Barber 2000). These latter cases exemplify the feminization of labor migration – a process evident across a large number of societies (Castles and Miller 2003). Yet, the literature remains mired in uncertainty regarding the mechanisms that drive the shifting gender composition of migration due to the inherent complex and circular causality linking gender, migration and development over time.

Our study includes both descriptive and analytical components. The descriptive focuses on whether or not and at what rate women are incorporated into a migration stream that is initially dominated by males. Much of what is now known or understood follows directly or indirectly from an influential study on the temporal dynamics of migration from 19 Mexican communities (Massey, Goldring and Durand 1994). However, there is little, if any, empirical evidence describing the evolution of the gender composition of migration for a nation over time, from an initial state of *no migration* to one where migration becomes a normative practice. The difficulty of migration data collection partly explains this lacuna (Cerrutti and Massey 2001; Zlotnik 1990), as does the fact that local data collection efforts rarely predate the

onset of international migration movements. We make use of a rich source of micro-level data from Albania enabling us to quantify both the overall migration trends from the onset of migration out of Albania in 1990 to 2004 and also to examine the temporal shift in the gender composition of out-migrants.

The second and more analytic component of our study focuses on shedding further light on the causal mechanisms that drive female participation in international migration. This effort requires an understanding of how gender operates in the migration equation and how this function may or may not change over time (Boyd 1989; Pedraza 1991; Pfeiffer et al. 2007). A gendered perspective is particularly salient in the Albanian migration context where large-scale social forces changing women's status are at work just as the restrictions to international migration are removed. On the one hand, many of the forces at work have contributed to raising the incentives for both male and female migration. On the other hand, cultural and economic factors are also eliminating certain vestiges of gender equity enforced by the fallen communist regime, and the status of women has declined. The two opposing influences provide an interesting macro-level backdrop to examine the dynamics and determinants of female migration over time.

Interest in this case is also heightened by the quasi-experimental nature of the Albanian context which has been described as a unique migration laboratory (King 2005). Within a few short years following the opening of its borders to international migration in 1990, Albania witnessed a remarkable out-migration, primarily to Greece and Italy, which led to the departure of about one-fifth of the country's population (Carletto et al. 2006; King and Vullnetari 2003). Whereas most migration from Albania at the start of the 1990s was male-dominated, a decade later women comprised 41 percent of Albanians in Italy and Greece (Vullnetari 2007). In our study, we use nationally representative survey data from Albania from 2005, which includes a unique retrospective module reconstructing full migration histories of all sons and daughters of the household head, to examine the pattern as well as mechanisms that underlie the gender and migration relationship. Our analysis focuses on how migration is affected by human capital and migration networks, and how these relationships change over time. We also examine the impact of the supply of male and female siblings as well the effect of various forms of

household level shocks on migration and how these factors and their influence may vary over time. The retrospective nature of our data and the fact that migration begins from essentially zero provides an opportunity to overcome numerous concerns regarding causal validity.

Underlying these more specific tests lays a deeper question: does increasing female migration signal an emergent independence of female action? The question of independence and agency remain core issues in the context of gender and migration (Hondagneu-Sotelo 1992; Morokvasic 1984); yet, there is surprisingly little empirical work aimed at explicitly testing agency in this context. It remains unclear from the literature whether increased incorporation of women into the migration process, both as familial migrants and as economic migrants, signals strengthening independence and empowerment over the course of development or whether female migration is primarily a response to household migration strategies. This lack of clarity is partly due to the circularity of causal factors connecting migration, gender status, and development (Massey et al. 1993; Palloni et al. 2001). While avoiding a direct entanglement with longstanding debates on the meaning of agency (Hitlin and Elder 2007; Loyal and Barnes 2001), we nonetheless hope to shed light on the growth or decline of independent female action as evident from the evolution of female participation in the international migration process.

2. Gender and migration: history and context

The complexity of the international migration process as well as the interdisciplinary nature of scholarship in this field has yet to lead to the formulation of a unified theoretical perspective on migration and gender. This situation is partly due to the broad range of theoretical approaches that have been developed (Davis and Winters 2001; Donato et al. 2006). The economic approach, begun in the neoclassical tradition and further developed by Todaro (1969; 1976), emphasized the expected gains to potential migrants and implications of policy programs that aim to reduce rural out-migration. Later developments in this field, coming under the title of the new economics of labor migration, have focused on the context and boundaries of decision-making and have pushed both economists and non-economists to consider the complex household level strategies underlying migration (see Stark 1991). This has meant increasing attention to risk and credit constraints, for example, as primary motivations underlying

migration strategies (Rosenzweig and Stark 1989; Taylor 1986). Sociological and demographic theory-building has paid keen attention to the contributions of economists, and the underlying rational actor micro-level model has been adopted in many cases, but parallel theories and models have paid equally close attention to the role of social networks and underlying structures in determining migration patterns (Boyd 1989; Entwisle et al. 2007; Massey and Espinosa 1997). These in turn have altered the thinking of economists who in recent years have incorporated network mechanisms directly into their models (Munshi 2003; Winters, de Janvry and Sadoulet 2001).

Yet, neither economic nor sociological approaches have until recently offered particular insight into the role of women in migration (Cerrutti and Massey 2001). Compelling critiques levied against the field, including Pedraza (1991) and Hondagneu-Sotelo (1992), argue for looking more closely at how women's roles are defined and their access to resources and decision-making both as migrants and non-migrants. As Cerrutti and Massey (2001) note in their discussion of both the neoclassical economics and the new economics of labor migration approaches, "(I)n neither case are women assigned much agency, either as autonomous decision makers or as independent participants in household bargaining." (p.188). This lack of agency would explain why much of the previous research on migration has positioned women as "secondary" or "associational" migrants (Kanaiaupuni 2000: p.1315). Empirical evidence from Mexico, as well as other countries with strong patriarchal systems, suggests that women eventually pursue more independent migration strategies. Likewise in Thailand, where traditional roles in the past had been assigned to women whereas young men were expected to be "freer from the household … or go adventuring," there is compelling evidence for a dramatic increase in female migration as economic opportunities and urbanization transform society (Curran et al. 2005; Curran and Saguy 2001). The implication is that at some stage of the migration process, cultural taboos against female migration are translated into a "culture of migration" (Kandel and Massey 2002). Whether increased female migration actually implies increasing female agency – or at least increasing independence in their actions - remains unclear since women may be simply following prescribed household strategies.

Furthermore, the growing concern over female migration in patriarchal societies has spawned a number of critiques in recent years about the extent to which women – even as tied or

associational migrants – may be involved in complex migration ventures which may end up reproducing patriarchal relations in the destination society (Hondagneu-Sotelo 1994). There is evidence suggesting that the motives and strategies behind female migration are expanding beyond the interests of the family or household (Cerrutti and Massey 2001; Kanaiaupuni 2000). Thus, even where women might be constrained in their ability to engage in independent migration strategies, tied-migration itself may be highly responsive to job opportunities and other economic incentives. This perspective is strengthened by evidence on gender roles post-migration, where even traditional families with patriarchal gender roles adopt greater flexibility to enable women increased labor force participation and education opportunities (Khazzoom 2006). Overall, there are signs of a new emphasis on male and female migration as individual actions but still embedded in household practices, strategies and traditions (Donato et al. 2006). Evidence also indicates that women have been shown to take advantage of specific forms of information derived from gender-specific migration networks (Davis and Winters 2001); to respond actively to underlying economic motivations even when they move as "associational migrants", and to exhibit distinct gradients with respect to education and other measures of socio-economic status (Kanaiaupuni 2000). Thus, female migration – while embedded in household and family strategies and interests – might well retain its own economic rationale and respond to its own particular incentives. These various incentives and constraints relate to human, financial and social capital factors whose impact we investigate in the next section.

3. Hypotheses on the causes of female migration

The preceding discussion suggests a number of potential hypotheses to explore in the context of Albania. The first of these relates to the powerful role of education on migration and how this effect is gendered. Evidence from Mexico suggests that higher education levels raise the odds of female migration just as they lower the odds of male migration (Kanaiaupuni 2000). One explanation is that women, relative to men, typically face more discrimination in local labor markets, and this raises their incentive to migrate towards more egalitarian labor markets. The relationship between education and gender is complicated in Albania, where the communist state pushed for egalitarian education but longstanding patriarchal and patrilocal traditions have often meant that equal or higher education levels for women failed to translate

into equal access in the labor market (INSTAT 2004). It is clear that local labor market inequality deepened during a series of severe economic crises following the end of the Hoxha regime and this effect was exacerbated by major shifts in employment opportunities within Albania (Cuka et al. 2003)– similar to those witnessed across a number of post-socialist states (Einhorn 1993; Occhipinti 1996) – which raised incentives for female migration. It is equally clear that the post-communist state no longer invested so much in gender equality – even nominal equality - leading to a rapid deterioration in the status of women and reducing their level of independence and empowerment. Such a turn in status is likely to push educated women – who have more to lose and easier access to migration relative to less educated women – to consider migration as an alternative. Male migration, in contrast, is far less selective – with a massive outflow of able-bodied males seeking jobs outside the country (Carletto et al. 2006). Our first hypothesis follows directly from the selectivity argument and predicts that female migration is more strongly associated with education than male migration.

A related question is if and how the absolute effect of education as well as its differential by gender evolves as migration becomes increasingly normative? Powerful evidence from Mexico highlights the declining degree of selectivity of migrants in terms of socioeconomic levels over time (Massey et al. 1994). This pattern is understandable given the central role of cumulative causation in the migration process. Albania should be similar as early waves of migrants established themselves, mainly in Italy and Greece, and facilitated the migration process for subsequent Albanians (Carletto et al. 2006). Thus, the effect of education on migration should weaken over time for both sexes. However, the decline in the role of education is likely to be weaker among women who continue to confront greater local inequalities. The evidence indicates that gender inequality in Albania rose over time limiting women's access to higher status occupations and generating "new forms of marginalization" (Calloni 2002; UNDP 2003). Our second hypothesis predicts that the spiral of discrimination provides an important push-factor for female migration and increases the male-female educational differentials of migrants over time.

Either alongside or in place of human capital and income-related factors, migration networks have emerged as central determinants of migration, with increasing attention paid to how various forms of social networks facilitate migration (Massey and Espinosa 1997; Taylor 1986;

Winters et al. 2001). Cumulative causation describes how networks create self-sustaining migration processes, partly through the generation of migration specific social capital – or migration capital. Studies have shown that migration networks are location-specific and matter more for international as opposed to domestic migration (Curran and Rivero-Fuentes 2003; Taylor 1986); they provide a stronger influence on closer rather than more distant kin or neighbors (Curran et al. 2005; Davis, Stecklov and Winters 2002); and their impact on migration is robust to various forms of unobserved heterogeneity (Palloni et al. 2001).

In addition, there are compelling reasons to believe that migration networks also function along gender lines. For example, gender segmentation of immigrants' labor markets may mean that sectoral-specific information on labor opportunities travels more easily across individuals of the same sex. The validity of these assumptions has been empirically tested in a number of studies - mostly in the context of Mexico-US migration. In one study, Mexican women are found to rarely migrate entirely on their own and their migration decisions appear less strongly associated with measures of human and social capital than the decisions of men (Cerrutti and Massey 2001). Other studies have found stronger roles for female networks, particularly on destination choices of female migrants (Davis and Winters 2001; Kanaiaupuni 2000). Davis and Winters (2001) show that male and female networks for Mexican immigrants function similarly in that they both affect female migration behavior and apparently operate as substitutes. A recent study from Thailand further demonstrates the gender specificity of migration capital in terms of its impact on male and female migration decisions (Curran et al. 2005). Yet, notwithstanding the above-mentioned study from Thailand, the preponderance of quantitative empirical evidence on cumulative causation is built on the Mexican migration case. This geographic focus constrains the development of a more generalized understanding of the linkage between cumulative causation and migration.

A further constraint to forming a deeper understanding of the connection between gender and social networks – and unrelated to the empirical focus on Mexico – is that the validity of empirical studies remains hampered by the fact that migration capital is often already accumulated well in advance of data collection efforts. The complexity arises when migration streams go back in time and migration capital is interwoven with other forms of human and social capital. The interaction between these processes makes it more difficult to correctly

identify the role of migration networks on migration (Munshi 2003; Palloni et al. 2001). While innovative empirical strategies have been used to capture variation across regions in their access to migration resources from the distant past – such as McKenzie and Rapoport's (2007) use of railroad data from Mexico – migration becomes highly endogenous over time. Such endogeneity concerns resulting from reverse causality may be particularly acute when examining the relation between gender, social capital and migration. Ideally, from the standpoint of causality, gender in the process of cumulative causation could be examined from a start-date with no migration and its evolution analyzed. In Albania, there is both a clear starting point with data on migration capital existing prior to the start of migration as well as information on the rapid accumulation of migration capital over time. Thus, Albania, described as a real-world empirical laboratory for the study of migration and development (King 2005), offers an ideal setting to test our third hypothesis: migration capital is gendered with men and women relying more on both family and community networks of their own sex. Given the rapid expansion of migration capital combined with extensive social turmoil, our fourth hypothesis is that the value of migration capital declines over time.

Our last two hypotheses focus directly on two factors that affect household-level incentives for migration and which shed light on migration and gender. These include long term structural factors that constrain households – in this case the supply of sons – and short-term shocks associated with changes in household resources as well as the health status of household members. The focus on crises is particularly interesting given how such events may alter gender relations at both the household and societal levels (Peteet 1991) just as they affect the incentives and constraints on migration (Davis and Winters 2001). In Albania, there is strong reason to expect women to be more tightly bound by household decisions. The actions of women in Albania are constrained by "neo-traditional" and "neo-patriarchal" forms of authority in both their household and professional spheres of life (Calloni 2002). Many of these traditional systems of authority predate the communist period and have only recently reemerged with the demise of the Hoxha regime, though many patriarchal elements remained intact through the communist era (Becker 1983). Women suffered a rapid decline in autonomy partly due to the closure of a variety of industries where women were employed and the growth of an unregulated market economy (Cuka et al. 2003; King, Dalipaj and Mai 2006). The

overall decline in labor market opportunities affected women more than men, leading to increased unemployment and female dependency on husbands and male family members (King et al. 2006). This process has only been strengthened by the "rebirth of traditional patriarchal mentality" (Calloni 2002:49). The deterioration in the status of women both within society but more so within the household makes daughters more likely than sons to be called upon to meet the needs of households. The implication is that female migration will be more sensitive than male migration to variations in the constraints and incentives faced by households.

Within this context, our fifth hypothesis pertains to the role of household sex composition, which is a relatively inflexible constraint on household migration strategies. Because remittances play such a large role in the Albanian economy, all households seek to establish at least some children abroad (Carletto et al. 2006; Cuka et al. 2003). Households with a high proportion of sons have little need to allow daughters to migrate and will focus on sending sons. On the other hand, households with relatively few or no sons are constrained and more likely to call on daughters to migrate. To the extent that this is true – that demographic constraints play a direct role in whether daughters migrate – we argue that it provides a compelling indication for female migration being driven by household necessity. In contrast, because male migration is consistent with individual and household strategies, we do not expect son migration to be greatly affected by the presence or absence of daughters.

While the fifth hypothesis focuses on household responses to long-term structural constraints (i.e. household composition), our sixth hypothesis examines crises that may be described as unanticipated, as in the case of health or income shocks. Our sixth hypothesis is that while both sons and daughters are likely to be affected by household-level shocks, female migration behavior will respond more strongly than male behavior to income or health shocks. A greater degree of female elasticity of migration to household level factors reflects the weaker bargaining power of women within the household and provides a clear expression of their lack of independent decision-making. In this case, increased female migration may not necessarily signal an expansion of female empowerment or independence in the household or community.

4. Data

The data for this study come from the 2005 Albania Living Standards Measurement Study (ALSMS05) survey conducted by the Albanian Institute of Statistics (INSTAT), with technical assistance from the World Bank, between May and July, 2005. The sampling frame for the survey was stratified into four regions – namely Coastal, Central, Mountain and Tirana, the capital – and a total sample of 3,640 households from 455 census enumeration areas was drawn based on a multi-stage cluster design.

The ALSMS05 includes both a community level survey and household questionnaire, which covers general household demographics, education levels, asset ownership, expenditures and labor market participation. The central role of migration in Albanian society led to the inclusion of a set of unique survey modules on migration, which collected comprehensive migration histories for current and past household members. For adult children no longer living in the household, parents were interviewed as proxies and asked to provide migration histories since 1990 and through to 2004 on the timing of moves, destinations, and current location as well as the basic demographic and socio-economic characteristics of the offspring. The use of retrospective data is not without problems (Smith and Thomas 2003). However, the concern is attenuated because our focus is on gender differences in migration over time rather than absolute migration levels. Furthermore, the focus on first year of migration, a rather salient event in people's live, is likely to further reduce recall biases.

In this paper, we use the detailed migration histories collected for all sons and daughters of the household head and household head's spouse, whether currently living in the household, elsewhere in the country, or abroad. The data from this module enable us to construct time-varying measures of past migration of sons and daughters, i.e. our left-hand-side variable, which is a annual series of dichotomous variables indicating whether the individual had migrated for the first time in that particular year. While we focus on the timing of first-migration, supplementary analyses mentioned below also differentiate the outcome variable by destination (Greece and Italy versus other countries including other European destinations and North America) and by whether the migration was temporary or permanent.

The individual migration data for sons and daughters is used to measure migration capital. Family migration networks are time-varying and are estimated for each son or daughter based on the sum of all family migrants at each point in time, excluding the son and daughter

themselves. Also, aggregation of the migration data at the community level, excluding ego's household migration capital, provides a measure of time-varying community migration capital. All community migration data were also separated by gender to test for gender-specific forms of migration capital. The aggregation of past migration of other sons and daughters is carried out without incorporating migration from the most recent year to avoid endogeneity bias.

A rare perspective on migration incentives and constraints is collected in a module where households report on severe household-level shocks occurring each year since 1990. Shocks were categorized into one of four categories: a job loss; a major illness or death; a large loss of property; or an income shock relating to the collapse of the pyramid saving schemes. The shock variables are built upon the cumulative experience of households and the data are coded by whether a household had ever suffered a given type of shock. The shocks are measured annually and lagged, providing a time-varying indicator of their influence on both male and female migration patterns.

We also introduce a variable to capture discrete shifts in the effect of several of our explanatory variables. An epoch dummy is introduced which takes a value of one for the period 1996-2004 and zero for the period prior to 1996. Dichotomizing the period into two epochs both facilitates the interpretation of results and is substantively grounded in the literature where 1996 is seen as a turning point in the relationship between many of our covariates and migration. The pyramid scheme expansion and crisis that began towards the end of 1996 and the subsequent Greek and Italian regularization programs which created a surge in the migration of family members still in Albania, both introduced new push and pull influences on migration from Albania beginning in late 1996.

All of the above variables are time-varying, as is the age of the son or daughter. Otherwise, the remaining control variables are not time-varying. This includes education, which is divided into categories (completed up to 8 years of schooling, at least some high school education, or at least some university education). A wealth proxy, based on a principal components analysis of durable goods owned by the household in 1990, controls for household wealth prior to the beginning of migration thereby avoiding endogeneity with subsequent migration. Finally, the region of residence of the respondent is divided into seven categories including Tirana and then Mountain, Central and Coastal regions, each disaggregated into urban and rural sectors.

5. Methods

Our population at risk includes sons and daughters ages 15 and over reported by survey respondents. Because individuals only enter our eligible sample at age 15, many sons and daughters will not have reached age 15 by 1990 – reducing the total amount of time they are exposed to the risk of migration within our analysis. Children still under 15 years of age in 2005 are not exposed at all. Children that are older than 15 years of age are exposed to the risk of migration for up to 15 years or until their first migration episode, at which point their exposure ends. The retrospective migration module enables us to identify the timing of migration between 1990 and 2004 for the children of household respondents. Our empirical strategy is based on hazard analysis, which assigns exposure based on the reported data to the relevant time periods, enabling us to calculate first-migration hazard rates.[i]

We employ discrete time hazard models using logistic regression to estimate the hazard of first-migration between the years 1990 and 2004. The hazard analysis has several advantages because persons are observed over the course of up to 15 years and some, but not all, make transitions – i.e. move abroad for the first time – in any given year. In many cases, no out-migration occurs over the observed time span. These cases are right-censored because they may well end up migrating after the observation period is over (post-2004). Our focus on first-migration episodes is driven both by data and substance. Our data are better suited for analyzing first migration episodes because not every migration episode is captured for those who migrate repeatedly nor do we have information on multiple moves in a single year. Furthermore, the first-migration episode is substantively appealing because our interest is in the ability of women to access migration opportunities and once they have migrated it is reasonable to assume that some formal or informal threshold has been crossed.

We adopt a flexible specification requiring little structure on the year-to-year variation in the baseline hazards by introducing dummies for each year to allow for annual variation in the baseline hazards between genders. Thus, our dependent variable indicates whether an individual has migrated for the first time in a specific year from 1990 onwards and takes a value of 1 if the individual has migrated for the first time in that year, and 0 otherwise. Because individuals are repeatedly observed between 1-15 times, coefficients and standard errors are adjusted in all models to avoid downward-biased estimates.

Our analysis revolves around the six hypotheses described earlier. Our main strategy is to focus on a set of pooled baseline specifications where all our main variables are included but male and female differences are all subsumed in a gender dummy. A series of interactions between gender and the control variables are then introduced in addition to the variables in the baseline. Three subsequent models each introduce a set of variables directly associated with a particular hypothesis. Finally, a nearly-saturated model with a full set of variables is examined where the gender dummy interacts with practically all the covariates for the different hypotheses in order to gauge whether the proposed mechanisms are complementary or competing.

Following each test of a main effect, a series of alternative hypotheses are tested regarding temporal shifts in the main effects or shifts in the gender differentials of these effects. These are estimated using single-sex models where we introduce an interaction between an epoch dummy variable and other explanatory variables to test whether their impact shifts between the period 1990-1995 and the period 1996-2004. Although this is an admittedly simplistic interpretation of any shift, it nonetheless is founded on both popular and academic conceptions of the mid-1990s as a turning point in the migration process.[ii]

All coefficients discussed in the text are significant unless otherwise noted to avoid needlessly repeating statistics presented in the tables. Our estimated coefficients are presented as odds ratios and are interpreted as the proportional effect of a change in a given variable on the hazard odds of ever-migration. We present the exponentiated coefficients along with a system of stars to indicate significance rather than standard errors or t-statistics. Admittedly, some details are removed but we feel the clarity in the tables is essential given the large number of models and coefficients (full results are available upon request). Finally, given concerns over unobserved heterogeneity (or frailty), our baseline model is retested using a random effects logistic model for both sexes, and we find little cause for concern.[iii]

6. Results

a. Descriptive Analysis

Our working sample contains 3888 sons and 4183 daughters reported by 2501 households. These figures translate into an average of 3.2 children ages 15 and above reported for each household. Such a high figure is not surprising given Albania's historically high fertility levels

that have only recently declined (Falkingham and Gjonca 2001). Exceptional levels of migration from Albania have led to a situation where 41 percent of sons and 18 percent of daughters in the sample had ever-migrated by 2004. Thus, the chances of a son ever migrating are more than twice that of a daughter. While a staggering proportion of children migrate, migrant children are not spread equally across households. Among parents that report children 15 years and older, almost half (over 46 percent) report that their children have no international migration experience. The data also reveal the primacy of Greece and Italy as migration targets with 85 percent of men and 78 percent of women that have ever-migrated are reported by their parents to have made these two countries their first destination.

The time pattern of first-migration from Albania between 1990 and 2004 is displayed in Figure 1 where the hazard is plotted – based on a discrete-time hazard model for men and women separately and including only year dummies. The estimated hazards range from extremely low values near 0 for women and near 1 percent for men in 1990 to nearly 3 percent for women and over 8 percent for men in 2004. From the perspective of migration stages, two distinct stages are apparent. The two stages appear separated by the dramatic turnarounds associated with the failed pyramid schemes of the mid-1990s. The increase in the migration hazard in the early 1990s is much steeper than for men but also settles down more quickly. For both sexes, migration falls dramatically in the mid-1990s. The male migration pattern is shows striking shifts over time. This begins with the dramatic surge in the early 1990s followed by the slow down towards the mid-1990s. Then a second dramatic surge begins in the second half of the 1990s followed by a leveling off and a slowing down after 2000. In contrast, the female temporal pattern is rather less dramatic and indicates gradual and increasing levels of migration for much of the period, aside from the decline in the mid-1990s, and only in the early 2000s is there any clear evidence of declining migration. Migration levels increase slowly and steadily until 2002 with 1996 appearing as more of an exceptional year. Consistent with our initial expectations, there appears to be a shift around 1996, with an apparent rise in the probability of migration in the second half of the 1990s. This rise is most likely due to the expansion and subsequent failure of the pyramid saving schemes that erupted in late 1996 as well as the regularization of Albanian migrants in Greece in 1998 followed by further regularization programs in Greece and Italy. Finally, a very notable slow down in both male and female

migration occurs around 2000 and this downward trend persists through to 2004. While this decline may be temporary, it may also be tied to economic and political progress within Albania which appears to have slowed the migration outflow (World Bank 2003).

Summary statistics in Table 1 provide mean estimates for the main variables in our analysis. Summary statistics are of limited utility in the case of discrete-time hazard models because different individuals appear in the data for different durations – entering and exiting the data in different years - thus providing different amount of input into the summary statistics. Nonetheless, they can be informative. We provide two separate partitions of the data. The first is by gender and the second is by ever-migration status. We also provide results for statistical testing of mean differences, which are adjusted for clustering due to multiple observations per person. We use t-tests in the case of continuous variables and chi-squared tests for dichotomous measures. Different levels of significance here and throughout the paper are noted using asterisks (see table footnotes). The test in the first column provides an indicator of the level of significance in the comparison of mean differences between men and women while stars in the third column represent the test between ever-migrants and non-migrants.

Several notable differences emerge from Table 1. Not surprisingly given the attention to female education during the communist regime, women are better represented at the upper education level (at least some university education) with 12.8 versus 10.4 percent for men. Daughters are more represented in households that report an illness shock and slightly larger number of female siblings. Also, the network measures at both the family and community level indicate quite large male and female differences in migration capital. The differences in the last two columns of Table 1 between ever-migrants and non-migrants are even starker. Migrants are observed on average slightly before non-migrants both in terms of the mean year of observation and the mean age – reflecting the fact that migrants are censored earlier than non-migrants. Migrants are more likely to be from the Coastal regions or Central urban and much less likely to be from the Mountain regions. There is also a wide gap in the 1990 wealth index with migrants coming from households that were better-off. The findings suggest that migrants have lower education levels. Neither indicator of existing networks in 1990 is significant. On the other hand, the network measures are very significant although not necessarily in the expected direction.

b. Multivariate analyses

We begin our analysis with a set of pooled models in Table 2 that includes all of our main variables but where the effects do not vary by gender. The estimates in Table 3 show similar specifications estimated on each sex separately. Separate estimates by gender make it easier to highlight substantive similarities and contrasts in male and female migration patterns over time while the interaction terms in the pooled two-sex models in Table 2 provide statistical tests of whether the gender differences are significant. This baseline model (Model 1 in Table 2) subsumes the entire gender difference within the shift of the baseline hazard shown by the gender (female) dummy. The results indicate that the hazard odds of annual migration for women remain nearly 74 percent lower than men's when all the control variables are included. The large gap in the underlying migration hazard for men and women is consistent with the descriptive statistics as well as Figure 1. Note that in a simple model with only gender and no other control variables (not shown) the female hazards odds are 69 percent lower than the male hazards odds. The similarities across the two models reflect the limited ability of the control variables, when their effect does not vary by gender, to explain overall gender disparities. The consistency of the female coefficient which captures the gender difference is even more striking in the full model (Model 6 of Table 2). In this case, the gender coefficient reflects the fact that the hazards for women are 78 percent lower than for men, even after allowing for the age, location, multiple forms of migration capital, and demographic incentives to vary for men and women. While the exact value of the main gender coefficient varies as we move from Model 1 to Model 6, the large gender differential remains quite stable.

Because our focus is on understanding the factors associated with differences for men and women in the first instance of international migration, we make no effort to distinguish migration determinants by the length of the migration episode. Nonetheless, part of the difference between the overall male and female migration odds, seen in Table 2, is due to differences in the odds of permanent and temporary migration for men and women where permanent migration includes adult children now living abroad and temporary includes those individuals that migrated internationally at some point but have now returned home. The gender migration gap is larger for temporary migration, which is primarily driven by labor

motives, than for permanent migration, which is driven by a combination of labor, marriage, and other factors. When the baseline model specification is replicated but only permanent migration is considered (not shown), the female odds are 56 percent smaller than the male odds of migration (p=0.000). In contrast, when only temporary migration is included, which is primarily for labor motives and to Greece, the female odds of migration are 84 percent smaller than the male odds (p=0.000). This distinction is ignored in the remainder of our work which focuses on the factors that affect "first-migration" irrespective of the type.

The temporal dynamics of out-migration from Albania, shown in Figure 1 and discussed above, are shown in our statistical tables. We use 1996 as the omitted year for these models because it is widely seen as a turning point and this facilitates the comparison for readers of changes over time following 1996. It is clear from Table 3 that the male hazard odds of migration peak around 2000 while the odds for women plateau around 1998. For both sexes, however, one can describe the period from 1991 through to the mid-1990s as a first stage of migration, certainly relative to 1990 when only a trickle of migrants came out. Then, the period following the mid-1990s can be described as the commencement of a second and stronger surge in migration. This surge begins to taper off towards the end of the 1990s for women and in the early 2000s for men, with levels returning closer to the 1996 hazards. However, as seen in Table 3, the increase in female migration, which starts at lower initial levels, is considerably larger than the increase for men and the fall towards the early 2000s also appears sharper.

A more formal statistical test of the gap between male and female migration patterns relies on re-estimating the pooled model while interacting the gender and year dummies (see Table 2 Model 2). Few of the interactions between gender and year are actually significant. The results indicate a continued reduction in the male domination of migration, beginning around 1995, based on a much stronger increase in female migration odds over time relative to male migration odds. This increase in female migration, even relative to the rise in male migration, is not steady but appears to peak around 1997. The strongest absolute levels in female migration relative to 1996 are in 1998 and 2000 (see Table 3). A joint test of the gender and year interactions from Model 2 is significant ($\chi^2(14)=24.6$; p=0.039), but loses significance in the full specification of Model 6 ($\chi^2(14)=23.5$; p=0.053). Overall, there is a substantial and

significant rise in female migration relative to male migration which peaks during the middle of the period and then tapers off as the migration hazards become less gendered after 2000.

The baseline results in Model 1 highlight the regional disparities in international migration. Relative to Tirana, hazard odds of ever-migration out of Albania are 57 percent greater for those living in the Coastal urban and 25 percent greater for those living in the Coastal rural zones, 24 percent greater for those living in the Central urban zone, 20 percent less for those living in the poorer Mountain urban zone and 31 percent less for those living in the rural Mountain zone. There is an important gender dimension to these regional distinctions. Separate male and female models in Table 3 indicate large and significant increases in the hazards of male migration for the Coastal and urban Central zones relative to Tirana, whereas none of the regions outside of Tirana are clearly associated with greater migration for women. Returning to Model 2 of Table 2, the weaker effects of other regions relative to Tirana for women relative to men is demonstrated by several substantively large and significant interactions between gender and the regional variables. These interactions are also highly significant when tested jointly ($\chi^2(6)=111.2$; $p=0.000$). These regional differences are shaped by variations in economic conditions and cultural norms across Albania - likely factors in explaining differential gender empowerment.

The age pattern of migration for men and women both show a similar inverted-U relationship, peaking at ages 20-25 (odds ratios of 67 and 131 percent increases relative to 15-20, respectively, in Table 3). The peak is higher at ages 20-25, and the subsequent drop in migration risk lower, for women than for men. After introducing the interaction term between gender and age in Model 2 (Table 2), the odds of a woman versus a man migrating increases with age, and these results are jointly significant ($\chi^2(6)=20.9$; $p=0.002$). The increased migration of older women, particularly those ages 40 and above, is consistent with the "orphaned granny" hypothesis, observed in qualitative fieldwork, where grandparents migrate to provide childcare for the children of their own migrant children (King and Vullnetari 2006). Similar patterns have also been identified among older Mexican migrants (Kanaiaupuni 2000). We also tested for a shift in the age pattern over time using an epoch dummy to distinguish the early 1990's from post-1995. The main findings (available upon request) indicate that the effect of age appears to change post-1995 but that this shift differs for men and women. Single-

sex models with interactions between the epoch dummy and age indicate that the dominant trends are a 80 percent increase over time in the hazard odds for men at ages 20-25 ($p=0.000$) and a 78 percent decline in the hazard odds for female migration at ages 40-45 ($p<0.01$).

Hypotheses 1 and 2: Gender and education

Our first two hypotheses explore differences in how education is associated with migration by gender and over time. From the baseline model (Model 1 Table 2) we note that education is associated with 14 percent higher hazards odds of migration when comparing individuals with at least some high school to those with no high school at all, but that those at the top level of education (at least some university) exhibit the lowest migration odds – 21 percent lower than those with no high school. Thus, when the effect of education is not differentiated by gender we find an inverted-U pattern in the relationship between education and migration. Our first hypothesis can be evaluated using both Table 3 and Model 3 of Table 2, where interactions between gender and education are included. From Table 3, the very different association of education with gender is apparent. Male migration is lowest for those in the highest education category while female migration is highest for those in the middle education category. From Model 3, the interaction coefficients indicate that the effect of education on female migration relative to male migration is stronger by 65 percent for those in the middle education level and by 123 percent for those in the top education category, relative to the male-female differentials at the lowest level of schooling. A joint test of both gender-education interactions indicates that education bears a stronger association with female rather than male migration ($\chi^2(2)=33.3$; $p=0.000$). This stronger degree of selection on education for female relative to male migration is consistent with findings from other settings (Kanaiaupuni 2000; Pfeiffer et al. 2007).

Our second hypothesis focuses on temporal change in the effect of education and particularly on how it varies by gender. In Table 4 we test for both change in the effect of education by epoch for each sex as well as for both sexes combined. The model for both sexes shows that the effect of education is weakened in the second epoch by roughly 30 percent when comparing the middle and upper educational categories to the lower category and both contrasts are individually significant at the 99 percent level. Thus, the role of education does

appear to weaken over time, but our hypothesis is that the decline is stronger for men. The results of this test are shown in the male and female models of Table 4. In support of our second hypothesis, the decline is more pronounced for men so the education-migration gradient strengthens over time for women relative to men. Introduction of the epoch dummy and its interaction with education in a male-only model produces a large and significant decline of about 40 percent in the impact of each of the two upper education categories on the migration hazards (see Table 4). For women, in contrast, there is no apparent change in the effect of the high school education in the post-1995 period relative to pre-1996 although the higher educational category interaction with the epoch dummy is marginally significant.

Evidence from Albania suggests that educational and migration should be linked differently by destination. Certain types of migration destinations are likely associated with higher levels of education, as returns to education vary across countries, and this association may vary by gender. These differences can be examined through a separate test using only individuals that eventually migrate and testing how gender and education affect migration to Greece and Italy versus migration to countries beyond these two major destinations. In a very simple pooled model including only dummies for year and gender (results not shown but available upon request), the hazard odds of women migrating beyond Greece and Italy is shown to be 47 percent greater compared to men's (p=0.000). When education is included the gender effect disappears but we find that having at least high school level education raises the hazard odds of migration beyond Greece and Italy by a factor of almost two (p=0.000) and at least some university education increases the hazard odds by a factor of eight (p=0.000). When education and gender are interacted, we find that the effect of education on migration beyond Greece and Italy is greater by some 25-30 percent for women in the middle and upper educational category relative to men in those categories and that these two coefficients are jointly significant ($\chi^2(2)=6.8$; p=0.037). Thus, higher education levels are associated with greater odds of migration beyond Greece and Italy and this effect is particularly strong for women.

Hypotheses 3 and 4: Gender and networks

Our next two hypotheses focus on the role of migration networks and how these effects might vary by gender and by the gender composition of the network. More specifically, our third hypothesis posits that migration networks of the same sex as the potential migrant are more influential. Our fourth hypothesis predicts that network effects should weaken over time. Albanians experienced a 45-year period, from the end of WWII to 1990, during which international migration was formally and practically shut down. The implication is that the fall of the communist government provides a "beginning" to an extended process of external migration. It is nonetheless true that family and friends who had emigrated from Albania prior to the closing of the borders under Hoxha, or the very limited numbers that successfully eluded border controls, may conceivably provide additional migration network capital (Vullnetari 2007). Fortunately, the Albanian data include questions regarding the existence of pre-1990 migration networks. We test the effects of both time-fixed measures of pre-1990 networks as well as post-1990 time-varying, lagged measures of family and community networks.

The results in Model 1 of Table 2 show that pre-1990 migration networks based on family friends abroad have no impact but those based on relatives abroad have a positive and significant, positive effect on current migration. While this latter coefficient is not very strong nor robust – unlike our main effects it is sensitive to minor variation in the sample definition – it nonetheless suggests that having some relatives who migrated is associated with higher migration after 1990. However, while this main effect of relatives abroad pre-1990 is positive and significant, its effect does not vary for male and female migration (see Model 5). In fact, only male migration is positively affected. Of equal important, the inclusion of the pre-1990 network variables have no impact on the coefficients for our time-varying network measures. This provides us with some confidence that controlling for the pre-1990 migration, which is itself proxying for household level characteristics, helps to ensure that the measured effects of post-1989 networks are specified accurately and that 1990-1991 is the actual launching point of migration from Albania.

Our results show that the time varying family migration network measures are highly influential (see Model 5 of Table 2 and Table 3). Both male and female family network variables are strongly associated with increasing ever-migration hazards. This is interesting and impressive given that controls are already included for the number of male and female siblings

older than 14. Furthermore, and more directly related to our hypothesis, the network effects appear to be gendered. Both male and female migrations are more strongly affected by the availability of family networks of the same gender (see Table 3). However, these effects are not necessarily equivalent for men and women. When these coefficients from Table 3 are tested, the difference between male and female family networks on male migration is not statistically different ($\chi^2(1)=2.2$; $p=0.140$) in contrast to the difference between male and female networks on female migration ($\chi^2(1)=4.6$; $p=0.033$). This first test is useful for understanding whether the effects of networks are gendered for male and female migration separately. Turning to the tests of the interactions of the family network variables with gender, the results in Model 5 show that the effects of female networks on male migration are weaker by 14 percent ($p<0.05$) and the effects of female networks on female migration are stronger by 24 percent ($p<0.05$). Thus, the effect of family network effects appears to work along gender lines as predicted by our third hypothesis. The same interaction coefficients are also jointly significant ($\chi^2(2)=8.6$; $p=0.014$), providing more general support for a difference in the effect of family networks on male and female migration behavior.

The effects of community migration networks also differ by gender, although the results are more difficult to interpret. Male community networks strongly increase male migration while female community networks reduce male migration, and the difference between the effects of male and female networks is both substantively and statistically significant. For example, Table 3 shows that a one percentage point increase in the percentage of a community's male adults that have migrated (up to the year before) is associated with a 0.6 percent increase in the hazard odds of first migration for men ($p=0.000$) and 0.5 percent increase in the hazard odds for women ($p=0.000$). In contrast, a similar one percentage point increase in the size of the female community migration network is associated with a 1.5 percentage point reduction in the odds of male migration ($p<0.01$) and with no change in the odds of female migration. The effect of male and female community networks are statistically different for male migration ($\chi^2(1)=12.5$; $p=0.000$) but not for female migration ($\chi^2(1)=0.03$; $p=0.867$). More generally, from Model 5 in Table 2 we see that the impact of female but not male community networks differ by gender ($p<0.01$).

The combined results of family and community networks mean that we are unable to entirely reject or accept the third hypothesis. From the perspective of family networks, the network effects are clearly gendered with male and female networks affecting migration of the same sex more than of the opposite sex. However, the results are not so clear when we turn to the effects of the community networks. In this case, male networks matter for both male and female migration whereas female community networks are negatively associated with male migration. This negative effect is unpredicted and requires more research. It seems reasonable to suggest that the community networks, more than family network measures, are themselves capturing a host of unobservables and they need to be carefully interpreted.

However, as hypothesized, the effect of networks, whether gendered or not, weaken over time and here the difference between family and community networks is notable. Table 4 shows the interaction terms between the epoch and network variables. In the first case male family network effects from 1996 and on are associated with a 25 percent decline in the hazard odds of male ever migration ($p<0.01$). For female migration, female family networks are associated with an even larger 31 percent decline but this coefficient is only marginally significant ($p<0.1$). In contrast, variation in the effects of male and female community networks across the two periods is less clear. The effect of male community networks on male migration shows a significant decline over time but the remaining network coefficients are not significant.

Hypotheses 5 and 6: Gender, household shocks and household demographics

We next explore the elasticity of male and female migration to household demographic, economic and health-related circumstances. Both household demographic factors and household-level shocks generate incentives and constraints with respect to migration. These incentives and constraints may affect male and female migration differently. But, to the extent that female relative to male migration is more closely tied to household-level incentives and constraints, we expect female migration to be more dependent on both types of factors.

We test two very different dimensions of constraints and incentives. The demographic dimension provides a relatively stable indicator of whether a low supply of sons may influence a household's decision to use daughters as migrants. This relative stability is due to the fact

that households develop over time reasonable foresight regarding the number of children of each sex ages 15 and above that they will have. This demographic component offers a very different perspective on incentives and constraints than is obtained by looking at the influence of household level shocks on son and daughter migration. Household shocks are by definition unpredictable. Thus, we view household demographic factors as a relatively static gauge of the embeddedness of female migration in household decision-making whereas household-level shocks may be seen as a more dynamic indicator of the extent to which female migration behavior is bounded by household strategies.

Our tests of the effect of demographic constraints show that both son and daughter migration is relatively insensitive to the total number of daughters in the household with both coefficients from the single-sex models (Table 3) indicating that an additional daughter reduces the hazard odds of migration by an insignificant 2.6 percent. An additional son, however, reduces the hazard odds of male migration by 4.3 percent ($p<0.05$), and each additional son reduces the hazard odds of female migration by a full 18.5 percent ($p<0.001$). The difference in the effect of number of male siblings on male and female migration is tested using the pooled model (Table 2 Model 4). As expected, the number of sons reduces the hazard odds of female migration by 16.7 percent more than it affects male migration ($p<0.001$) while the effect of the number of female sibs does not differ for male and female migration. The finding thus supports our fifth hypothesis in that the migration of daughters is far more responsive than the migration of sons to the number of sons ages 15 and above in the household, implying that daughter migration may be substituted for son migration in situations where households, wanting migration, have no alternative. In contrast, the number of female siblings has no substantive or statistical impact on migration for either sex. Thus, despite cultural scripts that generate strong preferences for son versus daughter migration, households lacking sons may find it necessary to adapt and enable daughter migration. Eventually, such mechanisms may be instrumental in redefining normative migration behavior and facilitate future female migration, though as noted earlier, this may not translate into greater independence for potential female migrants.

Our last hypothesis focuses on whether household level shocks affect male and female migration outcomes differently. We estimate separate models on men and women with four different household shock variables (Table 3), as well as a joint model to test differences in

gender responses (see Model 4 in Table 2). The results readily support our hypothesis that having experienced a type of household-level shock by a certain date affects female migration more than male. In fact, male migration appears wholly unaffected by the shocks. This is true from the coefficients on each of the shocks in Table 3 as well as from a joint test of all four combined ($\chi^2(4)=1.1$; $p=0.902$). For women, two types of shocks provide enough of an incentive (property loss) or a deterrent (illness) to affect migration. Illness of a household member reduces the odds of first-migration for women by 24 percent ($p<0.05$), while property loss shock increases the odds by 64 percent ($p<0.01$). A loss associated with the pyramid schemes also suggests a 52 percent increase in the hazard odds of female migration, though this last coefficient is only marginally significant. Both the property loss and pyramid scheme shocks indicate that households may in times of financial need turn to female migration to expand their support base. The effect of illness shocks supports the argument that women's migration behavior is more constrained by their role as homemakers and their relative lack of agency within the household.

The stark contrast between the effects of the shocks on female versus male migration outcomes highlights the reliance of female migration on the household and its changing context. A subsequent analysis (not shown) also tested and rejected the possibility that the effect of number of sons on female migration shifted and weakened in the second epoch ($p=0.905$). We also tested whether the shock effects changed over time using the epoch dummy. None of these interactions came out significant either, although neither the property loss nor pyramid loss could be estimated because both shocks primarily occurred in the second epoch (post-1995). What we could estimate was insignificant indicating no decline in the effect of the shocks on female migration over time. Thus, despite finding that female migration outcomes depend heavily on household constraints and incentives, we see no evidence to suggest that this reliance is weakening over time.

Competing Explanations

Our analysis has focused on a series of tests examining how female and male migration determinants vary. Several distinct mechanisms have been explored in turn. Focusing on the

main effects – that is putting aside the temporal shifts that we tested using the epoch dummy - a picture emerges that is broadly consistent with several of our hypotheses. The results provide strong support for hypotheses 1 (human capital) and 5 (supply of sons and household shocks) and only partial support for hypothesis 3 (migration networks). However, it is unclear whether the three main hypotheses actually operate in isolation or whether their effects are overlapping. We examine this question by estimating a model where all three components are introduced simultaneously (Model 6 in Table 2). The lack of change in the main coefficients of interest relating to our hypotheses indicates that there is little overlap in the alternative interpretations in terms of how they explain the male-female migration differences. Thus, these three factors are primarily complementary rather than competing hypotheses for understanding male-female differences in migration from Albania. This is an important point because studies are rarely in a position to test all three explanations simultaneously but our findings offer support to claim that findings in such cases may not be entirely mis-specified by omitted variable bias.

7. Discussion and Conclusion

Albania, perhaps more than any other nation, offers a unique perspective on the entire international migration process for a nation -- from a point where migration was legally forbidden until a time when migration became a central demographic and social process with over one-half of households reporting family members with migration experience (Carletto et al. 2006). This context provides an exceptional setting in which to investigate the relationship between gender and migration. While female roles and life course expectations are never static – Albanian women have seen formal government-imposed policies of "gender-parity" during the Hoxha regime replaced with more overt forms of discrimination and reduced power both in society and within households (Calloni 2002). At the same time, massive flows of international migration have introduced a range of new incentives and constraints on households in general and women in particular. Our data allow us to investigate how gender is manifested in migration and the role of human capital, migration networks, as well as household demographic factors and household level shocks in this process.

Preliminary analyses document the evolution of migration for both men and women from the opening of Albania starting in 1990 through 2004. While the probability of first migration generally increased through the 1990s and peaked towards the end of the decade for both men and women, a closer look reveals distinctive gender-based patterns of migration. Over this 15-year period, there is a substantial shift in female migration patterns relative to male patterns. At least until 2001, there is a progressive if not monotonic trend towards more equality in migration risks. This equality may be associated with several distinct processes including a series of exogenous events which occurred in the second half of the 1990s, including the failed pyramid saving schemes and the first Greek regularization program, but also due to the dynamics of family reunification after the early male migrants at the start of the 1990s settled and were able to bring families.

We posed a series of hypotheses to help understand the gender and migration connection. First, we showed distinct gender-specific gradients linking education and migration, with female but not male migration positively selected for education. Further analysis revealed that the importance of education declines to a greater extent over time for men. This supports our claim that increasing labor market inequality within Albania heightens differentials in the returns to migration for educated women relative to educated men.

We hypothesized that both family and community networks are gendered – both because of prior studies from Mexico and as well as the social turmoil associated with the end of the Hoxha regime in Albania – but that the importance of networks should decline over time. Our results are strong in that we find that family migration networks matter a great deal, but that the effect of community networks is more difficult to interpret. Familial migration networks appear gendered. However, the share of a community's males that have migrated affects both male and female migration but the share of a community's females that have migrated bears a negative impact on male migration and none on female migration. Here we can only claim weak support for our hypothesis. The routinization of migration within Albanian society, as predicted, appears to strongly reduce the role of family networks but there is little evidence regarding changes in the effects of community networks. The weakening impact of familial migration networks is an important finding which is not consistent with expectations from cumulative causation or from analyses of the Mexico-US migration context. In the Albanian

context, the *circa* 1996 shift in the value of networks as well as in the value of human and financial capital may be responsible. This shift coincided with the failed pyramid schemes and Greek regularization of Albanian immigrants and may have generated a diffusion of migration-related information which fundamentally altered the migration process.

Demonstrating the differential impact of human capital on female and male migration patterns highlights the extent to which incentives and constraints on migration differ by gender. Yet, these findings offer almost no insight as to whether educated women are taking advantage of opportunities as independent, empowered agents or whether migration behavior remains firmly anchored in family and household strategies (Hondagneu-Sotelo 1992; Stark 1991). Our last two hypotheses aim at the link between agency and female migration and employ unique data on household level shocks and household demography. Both sets of findings prove valuable. We find that female migrants appear to substitute for male migrants when households lack sons, suggesting that the demographic structure of the household may help to shape the incentives and constraints imposed on female migration. The fact that there is flexibility on the part of households may be encouraging, yet it also highlights the secondary role that female migration may serve for households lacking alternatives. Our results also indicate that female migration is more responsive than male migration to household-level shocks. In particular, household health shocks provide a large deterrent and household property loss and pyramid-related shocks provide a large incentive for female migration whereas neither shock has any impact on male migration. Thus, while female migration remains more tied to human capital factors, it remains simultaneously more tightly bounded by household-level incentives and constraints. Further analyses of the demographic and shocks variables also provide no indication that there is an increase over time in independence exhibited in the migration behavior of women.

In conclusion, our study reveals a complex and dynamic picture– one that emphasizes both the distinctiveness of female migration from Albania relative to male migration as well as the continued lack of independent female actions in migration. While there is evidence suggesting that female migration is increasing, this does not necessarily translate into equality, nor does it mean the absence of economic motives behind female migration. Quite the opposite, our results show that tied-migration, which is strongly associated with education, resources, and

migration capital, is responsive to economic incentives. However, it is the households themselves that appear to be the main decision-making agents behind this economic calculus, and there is little to suggest an emergence of female agency reflected in migration behavior. The embedment of female migration from Albania in the context of household-level strategies is demonstrated by both the dependency of daughter migration on the availability of sons as well as by the reaction of daughters to health or property loss shocks at the household level. Here, it would nice to conclude with a note of optimism – signs that women are increasingly agents of their own destiny, at least in terms of migration. However, our analyses of changes over time appear to indicate that women's migration remains solidly entrenched in other people's decision making.

Figure 1: Estimated male and female hazards of ever—migration 1990-2004, Albania 2005 LSMS

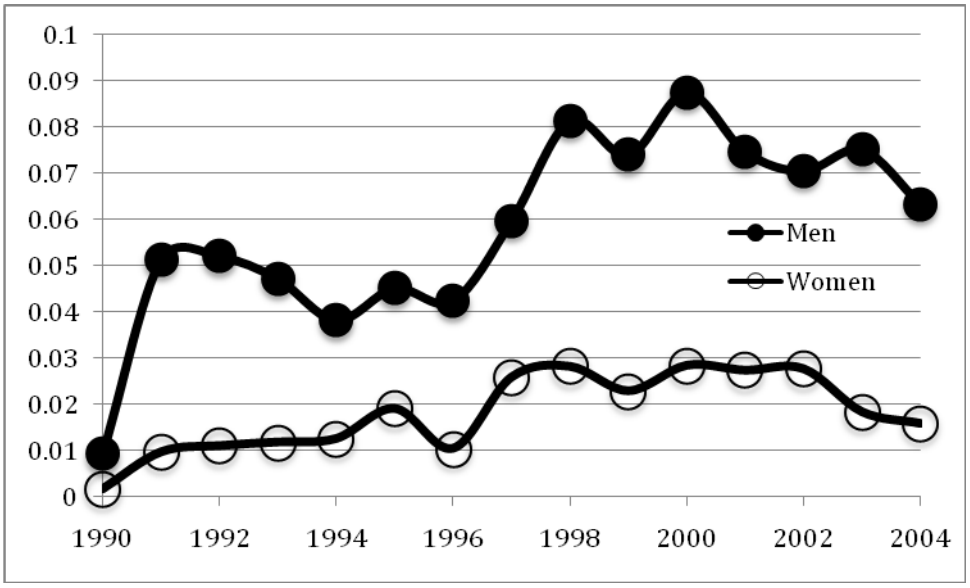

Table 1: Summary Statistics for Men and Women, Migrants and Non-Migrants, with Testing of Differences in Means corrected for clustering, Albania LSMS 2005

	Male	Female	Non-Migrants	Migrants
Year	1997.282***	1997.824	1998.199***	1995.819
Age	25.840	25.962	26.930***	22.948
Tirana	0.147	0.139	0.146	0.132
Coastal Urban	0.107	0.119	0.0993***	0.156
Coastal Rural	0.168**	0.197	0.179*	0.202
Central Urban	0.107	0.117	0.1063**	0.131
Central Rural	0.152	0.152	0.150	0.157
Mountain Urban	0.089	0.087	0.0922*	0.076
Mountain Rural	0.230***	0.189	0.227***	0.147
HH Wealth Index	0.099**	0.131	0.078***	0.231
Primary Educ	0.510	0.514	0.523***	0.480
At least some HS	0.386*	0.358	0.354***	0.416
At least some Univ	0.104**	0.128	0.122*	0.104
Job Shock	0.147	0.151	0.155**	0.131
Illness Shock	0.114**	0.131	0.139***	0.079
Property Loss Shock	0.026	0.026	0.028*	0.020
Pyramid Shock	0.020	0.020	0.018***	0.026
# Males Sibs >14	1.562	1.537	1.582***	1.450
# Female Sibs >14	1.712*	1.788	1.803***	1.616
Family Friends in 1990	0.015	0.015	0.015	0.016
Relatives in 1990	0.062	0.060	0.058+	0.070
HH Male migrants	0.216***	0.339	0.300***	0.244
HH Female migrants	0.085***	0.126	0.114*	0.093
Share of Muni Males migrants	12.143***	14.767	14.579***	10.870
Share of Muni Female migrants	3.397***	3.842	4.058***	2.462
Number of Cases	30916	40317	52972	18261

+ p<0.10, * p<0.05, **p<0.01, ***p<0.001

Table 2. Main hypotheses tested, discrete time hazard analysis of first-migration using male and female pooled model, all coefficients exponentiated, Albania LSMS 2005 (n=71233)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Female	0.262***	0.307***	0.199***	0.348***	0.294***	0.222***
1990	0.206***	0.212***	0.213***	0.209***	0.211***	0.209***
1991	1.199	1.239	1.244	1.222	1.232	1.221
1992	1.24	1.262	1.266	1.248	1.252	1.242
1993	1.135	1.118	1.12	1.108	1.108	1.1
1994	0.968	0.892	0.892	0.884	0.884	0.877
1995	1.259+	1.075	1.074	1.066	1.07	1.061
1997	1.678***	1.421*	1.418*	1.475**	1.426*	1.476**
1998	2.260***	2.066***	2.063***	2.051***	2.084***	2.065***
1999	1.957***	1.868***	1.864***	1.854***	1.899***	1.880***
2000	2.400***	2.262***	2.260***	2.251***	2.318***	2.301***
2001	2.084***	1.880***	1.879***	1.875***	1.935***	1.925***
2002	2.010***	1.766***	1.768***	1.764***	1.826***	1.823***
2003	1.813***	1.887***	1.893***	1.890***	1.969***	1.974***
2004	1.503**	1.559**	1.565**	1.568**	1.639***	1.650***
Age 20-25	1.799***	1.689***	1.688***	1.656***	1.695***	1.670***
Age 25-30	1.530***	1.473***	1.473***	1.424***	1.475***	1.442***
Age 30-35	0.992	0.909	0.91	0.873	0.91	0.887
Age 35-40	0.719***	0.668***	0.672***	0.642***	0.673***	0.658***
Age 40-45	0.532***	0.379***	0.383***	0.364***	0.381***	0.374***
Age 45+	0.220***	0.164***	0.166***	0.155***	0.168***	0.162***
Coastal Urban	1.570***	1.705***	1.637***	1.696***	1.715***	1.649***
Coastal Rural	1.253**	1.757***	1.653***	1.721***	1.680***	1.579***
Central Urban	1.236*	1.293*	1.276*	1.309*	1.288*	1.285*
Central Rural	1.009	1.299**	1.220*	1.269*	1.238*	1.157
Mountain Urban	0.797*	0.945	0.918	0.942	0.914	0.89
Mountain Rural	0.686***	1.002	0.939	0.966	0.949	0.876
HH Wealth Index	1.036**	1.017	1.027+	1.02	1.02	1.031*
At least some HS	1.139**	1.109*	0.975	1.108*	1.106*	0.989
At least some Univ	0.788**	0.757***	0.569***	0.744***	0.756***	0.588***
Job Shock	1.024	1.025	1.019	1.011	1.017	1.016
Illness Shock	0.869*	0.874*	0.878*	0.936	0.870*	0.926
Property Loss Shock	1.214+	1.193	1.192	1.009	1.189	1.008
Pyramid Shock	1.143	1.125	1.129	0.944	1.128	0.953
# Males Sibs >14	0.931***	0.924***	0.924***	0.965+	0.922***	0.957*
# Female Sibs >14	0.967*	0.971+	0.972+	0.981	0.971+	0.974
Family Friends in 1990	0.817	0.841	0.846	0.829	0.817	0.809
Relatives in 1990	1.226*	1.212*	1.211*	1.218*	1.241*	1.245*
HH Male migrants	1.284***	1.293***	1.298***	1.286***	1.370***	1.359***
HH Female migrants	1.323***	1.294***	1.297***	1.297***	1.170*	1.193*
Community Male Migrants (%)	1.005***	1.006***	1.006***	1.006***	1.006***	1.006***
Community Female Migrants (%)	0.994+	0.993+	0.993+	0.994+	0.985**	0.985**

Female x 1990		0.825	0.821	0.889	0.83	0.884
Female x 1991		0.842	0.837	0.89	0.847	0.888
Female x 1992		0.912	0.905	0.955	0.929	0.966
Female x 1993		1.047	1.041	1.082	1.07	1.101
Female x 1994		1.36	1.356	1.407	1.39	1.432
Female x 1995		1.721+	1.721+	1.768*	1.739+	1.787*
Female x 1997		1.767*	1.769*	1.55	1.744*	1.539
Female x 1998		1.381	1.383	1.399	1.345	1.371
Female x 1999		1.214	1.221	1.23	1.155	1.179
Female x 2000		1.255	1.263	1.261	1.171	1.188
Female x 2001		1.434	1.449	1.442	1.32	1.344
Female x 2002		1.536	1.552+	1.54	1.384	1.404
Female x 2003		0.937	0.943	0.932	0.825	0.829
Female x 2004		0.959	0.968	0.949	0.833	0.832
Female x Age 20-25		1.303*	1.296*	1.417**	1.306*	1.385**
Female x Age 25-30		1.212	1.199	1.385*	1.216	1.332*
Female x Age 30-35		1.378*	1.369*	1.582**	1.389*	1.526*
Female x Age 35-40		1.314	1.32	1.511*	1.305	1.442+
Female x Age 40-45		2.665***	2.680***	3.102***	2.646***	2.941***
Female x Age 45+		2.509*	2.672*	3.112**	2.440*	3.038**
Female x Coastal Urban		0.741+	0.787	0.752+	0.718*	0.762+
Female x Coastal Rural		0.338***	0.419***	0.360***	0.383***	0.478***
Female x Central Urban		0.844	0.863	0.841	0.839	0.858
Female x Central Rural		0.426***	0.556***	0.462***	0.473***	0.629**
Female x Mountain Urban		0.631*	0.656*	0.664*	0.682+	0.735
Female x Mountain Rural		0.176***	0.227***	0.203***	0.201***	0.279***
Female x HH Wealth Index		1.047+	1.02	1.039	1.037	1.008
Female x At least some HS			1.654***			1.554***
Female x At least some Univ			2.232***			1.966***
Female x Job Shock				1.041		0.998
Female x Illness Shock				0.795		0.817
Female x Property Loss				1.643*		1.622*
Female x Pyramid Loss				1.613		1.593
Female x # Male Sibs >14				0.833***		0.852***
Female x # Females Sibs >14				0.979		1.000
Female x Family Friends in 1990					1.109	1.116
Female x Relatives in 1990					0.933	0.93
Female x HH Male migrants					0.864*	0.875*
Female x HH Female migrants					1.238*	1.197+
Female x Comm. Male Migrants (%)					0.999	0.999
Female x Comm. Female Migrants (%)					1.019**	1.020**
Constant	0.034***	0.031***	0.035***	0.030***	0.032***	0.035***
Chi2	1681.815	1666.886	1666.643	1646.835	1746.644	1715.957
P-value	0.000	0.000	0.000	0.000	0.000	0.000

+ p<0.10, * p<0.05, **p<0.01, ***p<0.001; Ref categories: 1996, Age 15-20, 0-8 years edu, and Tirana

Table 3 Discrete time hazard analysis of first-migration for both men and women separately including all main variables, all coefficients exponentiated, Albania LSMS 2005

	Male	Female
1990	0.209***	0.184**
1991	1.221	1.084
1992	1.242	1.2
1993	1.1	1.21
1994	0.877	1.257
1995	1.061	1.896**
1997	1.476**	2.273***
1998	2.065***	2.830***
1999	1.880***	2.217***
2000	2.301***	2.735***
2001	1.925***	2.588***
2002	1.823***	2.560***
2003	1.974***	1.636*
2004	1.650***	1.373
Age 20-25	1.670***	2.313***
Age 25-30	1.442***	1.921***
Age 30-35	0.887	1.354*
Age 35-40	0.658***	0.949
Age 40-45	0.374***	1.101
Age 45+	0.162***	0.493*
Coastal Urban	1.649***	1.256+
Coastal Rural	1.579***	0.754*
Central Urban	1.285*	1.102
Central Rural	1.157	0.728*
Mountain Urban	0.89	0.654**
Mountain Rural	0.876	0.245***
HH Wealth Index	1.031*	1.039*
At least some HS	0.989	1.537***
At least some Univ	0.588***	1.155
Job Shock	1.016	1.014
Illness Shock	0.926	0.756*
Property Loss Shock	1.008	1.636**
Pyramid Shock	0.953	1.517+
# Males Sibs >14	0.957*	0.815***
# Female Sibs >14	0.974	0.974
Family Friends in 1990	0.809	0.903
Relatives in 1990	1.245*	1.157
HH Male migrants	1.359***	1.189***
HH Female migrants	1.193*	1.429***
Community Male Migrants (%)	1.006***	1.005*
Community Female Migrants (%)	0.985**	1.004
Constant	0.035***	0.008***
N. of cases	30916	40317
Chi2	642.746	609.804
P-value	0.000	0.000

+p<0.10,*p<0.05,**p<0.01,***p<0.001; Ref. cat. are 1996, Age 15-20, 0-8 years ed, and Tirana

Table 4. Discrete time hazard analysis of first-migration for men and women separately and a separate model with both sexes combined, including an Epoch (post-1996 dummy) and interactions, Albania LSMS 2005 (control variables from Table 2 Model 1 not shown)

	Males	Females	Both
Epoch	1.551*	6.223**	1.159
Epoch x At least HS	0.616***	0.929	0.759**
Epoch x At least Univ	0.592*	0.598+	0.645**
Epoch x HH Male migrants	0.750**	0.91	0.795**
Epoch x HH Female migrants	0.672*	0.685+	0.709*
Epoch x Share of Muni Males migrants	0.987*	1.008	0.993
Epoch x Share of Muni Female migrants	1.005	0.966	0.995
N. of cases	30916	40317	71233
Chi-Squared	676.926	624.253	940.789

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001
Note: Reference categories are 1996, Age 15-20, 0-8 years schooling, and Tirana.

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[i] As typical in other migration analyses based on samples from the country-of-origin (Mckenzie and Rapoport 2007; Winters et al. 2001), we are unable to provide information on the migration of entire families that have migrated.

[ii] Our main tests are replicated using 1997 as the beginning of the second epoch rather than 1996 with no substantive difference in the findings.

[iii] Biased hazard estimates are one recognized concern when frailty is ignored in survival models (Singer and Willett 2002). Practically, failure to treat the annual changes as random effects may lead us to underestimate theincrease in the hazard of ever migration. However, the fact that our hazard is not declining over time reduces the potential bias. Furthermore, when we compare the discrete time hazard model and the model with random effects on the same sample we find that the time coefficients are higher with inclusion of the random parameter, although we observe a similar time pattern (available upon request). Also, the similarity of the coefficients across both models further alleviates our concern regarding unobserved heterogeneity.