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ADVANCING THEORY AND EVIDENCE ABOUT MIGRATION AND CUMULATIVE CAUSATION: *DESTINATION AND GENDER IN THAILAND*

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Abstract

In this paper, we examine longitudinal data from Thailand and compare gendered migration patterns to three substantively different destinations (a regional, primarily agricultural wage laborer market; a primate city and its surrounding suburbs; and a newly industrialized, state sponsored export processing zone). By examining the differential effect of migrant networks on migration propensities of men and women across destinations, we aim to extend our theoretical understanding of the role of cumulative causation for influencing migration patterns. Because each destination is defined by different labor market characteristics related to gender and places of origin are also marked by different gender relations, we propose and find that there are significantly different patterns of migration when disaggregating the accumulated migrant experience by sex, destination, and place of origin (household or village). Using a unique data set from Thailand that allows us to observe variation across villages, households, and destinations over time, we observe that migrant characteristics as well as the effect of prior migration experience change dramatically by destination. Disaggregating migration experience by destination, we then find that experience in each destination increases the propensity of migration to that destination significantly. However, the magnitude of this increase is different in each destination. Further disaggregating migration experience by sex, we find that in all destinations, female migration experience has a stronger effect than male migration experience at each level of observation (individual, household or village) upon the probability of migration. Finally, modeling men's and women's migration separately, we find that the effect of migration experience also depends on whether the migrant is a man or woman.

ADVANCING THEORY AND EVIDENCE ABOUT MIGRATION AND CUMULATIVE CAUSATION: *DESTINATION AND GENDER IN THAILAND*

Introduction

In this paper, we examine longitudinal data from Thailand and compare gendered migration patterns to three substantively different destinations (a regional, primarily agricultural wage laborer market; a primate city and its surrounding suburbs; and a newly industrialized, state sponsored export processing zone). By examining the differential effect of migrant networks on migration propensities of men and women across destinations, we aim to extend our theoretical understanding of the role of cumulative causation for influencing migration patterns. Because each destination is defined by different labor market characteristics related to gender and places of origin are also marked by different gender relations, we propose and find that there are significantly different patterns of migration when disaggregating the accumulated migrant experience by sex, destination, and place of origin (household or village). Using a unique data set from Thailand that allows us to observe variation across villages, households, and destinations over time, we observe that migrant characteristics as well as the effect of prior migration experience change dramatically by destination.

Our research and previous research shows that migration processes are gendered and destination-specific, but there has been little empirical evaluation of how cumulative causation may differentially influence men's and women's migration across destinations. Our study is also different from previous studies evaluating the effect of cumulative causation because our analysis concerns internal migration, mostly rural-urban migration. We evaluate destination and gender differences in migration patterns in several ways. First, we compare the differential effect of migration experience upon migration propensities across destinations. Second, we evaluate the effect of destination-specific migration experience upon migration propensities across destinations. Third, we evaluate the effect of destination-specific and gendered migration experience on migration propensities of a pooled sample of men and women. And, finally, we evaluate whether the gendered migration experience to destinations matters more or less for women's and men's migration propensities.

We find compelling results. First, we observe that migrant characteristics as well as the effect of prior migration experience change dramatically by destination. Disaggregating migration experience by destination, we then find that experience in each destination increases the propensity of migration to that destination significantly. However, the magnitude of this increase is different in each destination. Further disaggregating migration experience by sex, we find that in all destinations, female migration experience has a stronger effect than male migration experience at each level of observation (individual, household or village) upon the probability of migration. Finally, modeling men's and women's migration separately, we find that these effects vary significantly depending on whether the migrant is a man or woman.

Background

The idea that migrant networks can evolve, accumulate, and generate higher than expected levels of migration out of communities of origin has yielded a considerable number of empirical studies and some policy attention (Massey 1990a; Massey 1990b; Massey & García-España 1987; Massey, Goldring, et al. 1994; Massey & Zenteno 1999). This idea, cumulative causation, is frequently equated with the concept of migrant social capital and is described as a process by which migration propensities, among those who are in origin communities (whether they are return migrants or otherwise), grow with each additional migrant in a migrant stream.[1] Propensities to migrate grow as information increases and reciprocal ties develop between origin and destination. Further, the theory holds that the other factors predicting migration propensities become less important in a context of high levels of migration. Empirically, the importance of cumulative causation in predicting migration patterns has been shown with data on Mexico-US migration (Davis, Stecklov, et al. 2002; Massey, Goldring, et al. 1994; Massey & Zenteno 1999; Espinoza & Massey 1999; Massey & Espinoza 1997; Winters, de Janvry, et al. 2001; Kanaiaupuni 2000), internal migration in Mexico (Lindstrom and Lauster 1999; Fussell

[1] Most studies measure migrant networks as simply counts of other people who have already migrated from a common social unit, either a village or family. The network tie is presumed based on the common social unit. Whether or not prior migrants actually participate in a network of relationships with the members of the social unit of origin is usually not quantified, although there is plenty of ethnographic evidence to suggest that on the whole a vast majority of migrants do participate in these networks. Therefore, we use the terms migrant network and migrant social capital interchangeably, reflecting the current literature and the presumption about the meaning of accumulated migrant trips and experiences.

2001; Rivero Fuentes and Curran, 2001) and more recently in Thailand (Curran et al., *forthcoming*).

Some researchers in the field of migration examining the influence of cumulative causation have argued for differences in the process depending on the destination. Taylor (1986) has suggested that cumulatively caused migration and related social networks are more important for international destinations than internal destinations in the Mexican case. On the other hand, Curran and Rivero (2003) have found that social networks are important for both types of destinations when the gender of the prospective migrant and the migrant network are taken into account. The authors have argued that cumulatively caused migration has different effects depending upon the social context of the destinations. They speculate that the reason for their finding might be that destination economies are differentially organized either in terms of their labor markets or their sectors and the ways in which migrants are incorporated into the social and economic life of destinations. We pick up where this research leaves off by specifying three different destinations with very different migrant and labor market characteristics. We argue that the mechanism of cumulative causation may work differently for destinations that vary systematically by their gender and migrant labor markets. For example, destination characteristics may differentiate migrants' social and economic ties to destination and affect their tendency toward settlement and consequently change future migration patterns (Massey 1985; Massey et al. 1987). In some destinations, high levels of migration may lead to social structural changes, e.g. emergence of an ethnic enclave of migrants that acts as an additional magnet for future migration to that destination (Portes and Bach 1985; Portes and Manning 1986). Similarly, destination characteristics may determine migrant selectivity. Since migration is a matching process between migrants' characteristics and employment opportunities in the destination, migrants may be selected differently depending on the destination. Selectivity of migrant networks may then reinforce differential migration patterns across destinations. Despite these well-justified motivations, to date, no study has tested the differential importance of cumulatively caused migration across destinations and outside of the Mexican case. One reason for the limited extension of these ideas is that there are few data sets collected in other contexts that allow for testing of these ideas. In this study, we take advantage of a longitudinal

data set from Thailand in order to fill this gap and observe migration to three different destinations: a regional, primarily agricultural wage laborer market (North Eastern Provinces); a primate city and its surrounding suburbs (Bangkok); and a newly industrialized, state sponsored export processing zone/city (Eastern Seaboard).

We suspect that the importance of cumulatively caused networks will be different in each case. These differences will depend on the relative distance of the destination, the characteristics of the labor market, and the maturity of the migrant stream. We will be testing one key dimension of the labor market, the gendered segregation of work opportunities.

In the first destination, the primarily agricultural wage labor market in the Northeastern region of the country, the proximity of the destination will mitigate against the importance of migrant networks. Further, the episodic and variable needs of agricultural labor will mitigate against the development of a systemic relationship between origin and destination. Finally, agricultural wage labor is primarily a male-based occupation involving the planting or harvesting of upland field crops. These destination characteristics will limit the importance of migrant networks for affecting migration, increase the selectivity of the migrant stream (less educated and male), and the importance of prior migrant experience will rest only with the individual's own experience not other household or village members.

In the second destination, Bangkok and the surrounding communities defining the Bangkok Metropolitan Area, the maturity of the migrant stream could result in at least two different outcomes. On the one hand, the fact that Bangkok has been a destination for migrants for many years may mean that the migration experience in Bangkok within a village or household may have reached such a high level that an additional migrant adds few new resources or little impetus for affecting someone else's migration. On the other hand, the migrant stream, although well-developed, may not be so developed as to have saturated an origin community. Instead, particular patterns, especially those based on gender may have been cemented and enhanced, increasing their importance in affecting migrant outcomes.

In the third destination, a new export processing zone – developed in the mid- to late 1980's, the migrant cumulative experience may be particularly influential when the

ties are defined by strength of relationship – either based in the household or demonstratively through frequent return trips, rather than extended stays in the destination. This is because a new destination where few people have had experiences my be perceived as fraught with risk. Only trusted, strong ties, may be perceived as good sources of information about destinations.

Recent work in migration also provides theoretical reasons and empirical evidence for taking into account the gendered aspects of cumulatively caused migration (Kanaiaupuni 2000; Cerutti and Massey 2001; Curran and Rivero 2003; Curran et al. *forthcoming*). Using Mexican data, Curran and Rivero (2003) show that gender relations imbue the quality of migrant social capital with very different results for men's and women's migration outcomes. For instance, they find that the prior internal migration of women from a household facilitates the migration of both men and women, but international migration of female household members only facilitates the migration of other women, not men. Men's internal migration has no influence upon either men's or women's migration to internal destinations but has a significantly greater influence upon men's international migration probabilities than upon women's (Curran & Rivero 2003).

Similarly, in earlier work, we demonstrate the importance of gender for shaping the content of migrant networks and the subsequent migration of men and women out of a rural Thai setting (Curran et al., *forthcoming*). In this earlier study, we disaggregate migrant social capital at the individual, household, village level by sex and observe its differential effect on women's and men's migration propensities. We find compelling results. Our analysis shows that migrant social capital measured at the household and village level influences migrant outcomes, however the effects depend on whether individuals are men or women and also on whether migrant social capital is male- or female-based. In this paper, we build upon these findings and the work of Curran and Rivero (2003) to show how gender also influences cumulatively caused migration to different destinations.

Given that gender is a fundamental category of social organization in most economic and social institutions, we expect that gender also influences the social relations within destination economies and societies and consequently influences the way in which cumulatively caused migration affects migration to different destinations. As

Curran and Rivero (2003), we expect to observe gender differences in migration to destinations due to possible gender differentiated barriers to migration as well as the sex-segregated labor market experience and the resulting exposure to sex-delimited migrant networks across different destinations. Different from Curran and Rivero (2003), we also intend to evaluate the effect of gender- and destination-specific migrant social capital on men's and women's destination-specific migration propensities. Similarly motivated empirical work has observed gender differences in migrant flows to destinations, however no previous study has considered how gender- and destination-specific migrant social capital may differentiate destination-specific migration outcomes. Therefore, in this study, we aim to do this by evaluating how cumulative causation may differentially influence men's and women's migration to different destinations or how the gendered content of different kinds of destination-specific migrant social capital might be more or less important for predicting migration behaviors to different destinations.

The Thai Context

Our study draws upon a longitudinal data file from one district in the northeastern region of the country.[2] This district is the source of many migrants both to rural destinations and urban destinations. In addition, the district is relatively poor and dependent upon rainfed irrigation to cultivate rice paddies. Consequently, many residents are increasingly dependent upon cash income from sources outside the district, including agricultural wage labor and migrant earnings in urban destinations.

- Figure 1 About Here –

Although migration from rural Thailand to urban Bangkok may not seem as dramatic as a move from rural Mexico to the United States, for many rural Thais during the mid-1980s it was. It was then that Thailand's shift from an agriculture-based export economy to a manufacture-based export economy took place (Bello, Cunningham, et al. 1998; Phongpaichit 1980; Phongpaichit & Baker 1996; Phongpaichit & Baker 1998;

[2] These data, the Nang Rong Surveys, were designed and collected by the Institute for Population and Social Research at Mahidol University and the Carolina Population Center, University of North Carolina. Information about the surveys is available at http://www.cpc.unc.edu/projects/nangrong/.

Warr 1993; Warr & Nidhiprabha 1996) and consequently migration took on added significance in Thai livelihoods. From the mid-1980s to the mid-1990s some experts estimate that Thailand's economy grew on average 10 percent per year (Bello, Cunningham, et al. 1998; Warr & Nidhiprabha 1996). This growth was fueled by production in export manufacturing, which was a result of the rising value of the Yen, rising wages in nearby newly industrialized countries (NICs), changes in textile import quotas to the United States, and dramatic increases in foreign direct investment, primarily from Japan (Nidhiprabha 1994; Phongphaichit and Baker 1998). By 1985 Thai manufacturing exports had outpaced rice and other agricultural exports in value (Nidhiprabha 1994; Warr & Nidhiprabha 1996). With the growth in manufacturing export came an increased demand for labor. Rural migrants provided much of this labor, coming mostly from the Northeastern part of the country, many of them young, and many of them women (Chamratrithirong, Archavanitkul, et al. 1995; Mills 1997; Phongpaichit & Baker 1996;). According to the 1992 National Migration Survey most migrants to the Bangkok metropolitan area were in their teens or early twenties and at least half of these migrants were women (Chamratrithirong, Archavanitkul, et al. 1995). Women's participation in rural-urban migrant streams is considerable, reaching as high as 60 % of all migrants (Tantiwiramanond 1995; Chamratrithirong et al. 1995). These rates are only surpassed in Asia by the migration rates of women from the Philippines and Japan (Tantiwiramanond 1995). It is important to note that these moves are rarely associational (family moves) but primarily for jobs for the women themselves (Chamratrithirong et al. 1995).

These positive characterizations of women's status are increasingly questioned by recent scholarship. These research note that women predominate in the low wage, low skill sectors of the economy, including low wage service jobs, prostitution, agricultural wage labor, and low skill manufacturing (like textiles, parts assembly for electronics, and food processing plants) (Sussangkarn 1993; Tantiwiramanond 1995). Importantly women consistently earn one-third to one-half as much as men in similar occupations (Phananiramai 1993; Richter and Havanon 1994; Tantiwiramanond 1995). Outside of seasonal construction labor, much of the destination labor market is sex segregated. Men tend to work in heavier industries, taxi driving and motorcycle services, automobile

servicing, and construction (Sussangkarn 1993). Hence, the kinds of information migrant men can provide for women may not be as helpful to women as the information from migrant women and vice versa. Besides the sex segregated export manufacturing work, women are also employed in domestic and other types of services, which are even more sex segregated.

There are also important differences in these gender-specific migration patterns across destinations. In this study, we observe migration to three different destinations: a regional, primarily agricultural wage laborer market (North Eastern Province); a primate city and its surrounding suburbs (Bangkok); and a newly industrialized, state sponsored export processing zone/city (Eastern Seaboard).

As mentioned earlier, the northeastern destinations are characterized by agricultural labor that is primarily male-based. We expect that migrant networks will have limited effects, but if they do, they will be centered upon male-based networks and influence male migrant outcomes, rather than be centered upon female-based networks and influence female migration.

Our predictions regarding Bangkok are different. We suspect a fairly sex-segregated labor market, but not because of selectivity of the migrant stream. Instead, we suspect that men and women both migrate to Bangkok but end up in labor markets that are generally sex segregated – either light weight manufacturing and service sector jobs (for women) or heavier manufacturing, construction, or transportation sector jobs (for men). The cumulative effect of these experiences will positively influence women's and men's migration, respectively, but not vice versa. Further, we suspect that migration experiences at the household level will be more important than at the village level for influencing migrant outcomes. This stems from two conjectures. First, other members of a household are very likely to have had some experience in Bangkok and this information will be more useful than that from other villagers. Second, and in a related vein, the maturity of the migrant stream to Bangkok is likely to have conveyed both positive and negative experiences back to prospective migrants. The quality of the information from a migrant network and its trustworthiness will be important. Household networks, because of their kin-based character, are likely to be more valuable and more trustworthy than village-based migrant networks.

Our predictions about the third destination, the newly established export processing zone, also have a gender component. Because the Eastern Seaboard's initial export was packed fish and shrimp, which drew upon the fishing industry, the first migrants to the region from Nang Rong were men who fished and lived on the fishing boats supplying the shipping and packing industry. As the export transportation infrastructure expanded and grew, light manufacturing along the Eastern Seaboard expanded. Alongside factory dormitories were built to house workers in sex-segregated housing units. Initial female migrants to the Eastern Seaboard drew upon their factory connections via their factory jobs in Bangkok to gain access to the new jobs in the Eastern Seaboard. In both cases, the relatively new destination means that migrant experience will be extremely helpful and be a significant influence upon migrant outcomes. The relative scarcity of information about the destination will mean frequent return trips by migrants will serve as the main way of conveying information. Further, we suspect that household networks will contain significantly fewer resources than village networks and therefore be less useful than village networks. Again, given the sex-segregated experiences, female village networks will influence women's migration and not men's and male village networks will influence men's migration to the Eastern Seaboard and not women's.

Given these gender- and destination-specific characteristics of migration flows, Thailand is a substantively interesting site for the purposes of this study. We expect that the very different context of gender relations in Thailand, a relatively high status of women with some freedom to migrate, dramatic economic growth creating jobs outside of the local economy for both men and women, gendered social ties with natal households and sex-segregated labor markets in destinations would create very different types of migrant social capital with different effects for men's and women's probabilities of being migrants to different destinations.

Data

The data for this study comes from one district in Northeastern Thailand, Nang Rong, in Buriram province. The Northeastern region of Thailand is known for supplying seasonal and permanent migrants to both rural and urban destinations (Chamratrithirong,

Archavanitkul, et al. 1995), mostly because of the relative poverty of the region. Rice paddies dominate the landscape, which are irrigated with rain. Frequent droughts and poor soil quality are severe limitations to the agriculturally based economy. The region, a frontier until the 1970's (Phongphit 1990), no longer has unclaimed arable land (Siamwalla, Setboonsarng, et al. 1993). The northeast region is also known for its relative poverty compared with other parts of the country (Phongphit 1990). Because of poverty, past high fertility and limited arable land for future development, the region has become an important source of migrants to urban centers in Thailand, primarily Bangkok.

The Nang Rong Surveys are a longitudinal data collection effort conducted by the Carolina Population Center at the University of North Carolina and the Institute for Population and Social Research at Mahidol University in Thailand. We employ the first two waves of data for this analysis, the data for the 1984 and 1994 survey rounds. The 1984 data collection was a census of 50 villages and included information on individual demographic data, household assets and village characteristics. The 1994 data collection not only replicated the 1984 survey, including a census of all households and information about former 1984 village members, but also included a 10-year retrospective life history about education, work, and migration, as well as key social and demographic events such as marriage, births (asked only of women, and entrance into military service or the Buddhist Sangha (asked only men) , information about siblings and their current residence, and a special survey of migrants.

We employ the information from the life history survey and the migrant follow-up, as well as information from the 1984 survey. The migrant follow-up component was conducted in 22 of the original 1984 villages and counted a migrant as someone who was a member of a 1984 household and had since left a village for more than two months to one of four destinations: the provincial capital, Buriram; the regional capital, Korat or Nakhon Ratchasima; Bangkok and the Bangkok Metropolitan Area; and, Eastern Seaboard provinces (Chachoensao, Chonburi, and Rayong). In related project manuscripts it has been documented how successful the surveys were at following households and individuals (Rindfuss, Kaneda, et al. 2002). For this kind of migrant follow-up, the success is considered remarkably high (Rindfuss, Kaneda, et al. 2002). On

average, for the twenty-two villages, about 43% of the migrants were successfully interviewed at some point in the six months following the 1994 village surveys.

In our analysis we build a data file that starts with 1984 household members that are 8-25 years old from the twenty-two migrant follow-up villages and are matched with information from the 1994 surveys. We use the life history information to construct a person-age file that begins with those individuals that are 13-25 years old in 1984 and then add persons to our dataset, as they become 13 years old. We chose 13 years old as the lower bound because it marks the end of primary schooling and the beginning of exposure to the risk of moving as an independent adult. In this data set, migration prevalence grows dramatically over the 10-year time period. The panels in Figure 1 display the overall migration prevalence rates by destination and by gender for all individuals for whom life history information was collected. A migration prevalence rate measures the proportion of people that have ever migrated up to a point in time (Massey, Goldring, et al. 1994). The top two panels show that migration prevalence to each destination increases in time, but the increase in migration to Bangkok (BKK) is much steeper than the increase in either Eastern Seaboard (ESB) or North Eastern Province (NE). By 1994, almost 40% of all sample has migrated to BKK at least once, while only 5% to ESB and 3% to NE. Migration prevalence of men and women increase at similar rates as seen in top right panel, however there are clear differences in migration prevalence to different destinations by the sexes. As clear from bottom left panel of Figure 2, almost 60% of migrants to BKK are female, a value that remains stable over the 10-year period. On the other hand, only 10% of migrants to ESB are female in 1984, a value which increases to 30% by 1994. It is this significant variability in migration prevalence over time and across the sexes and destinations that is of interest and provides an opportunity to evaluate their impact on individual migration propensities.

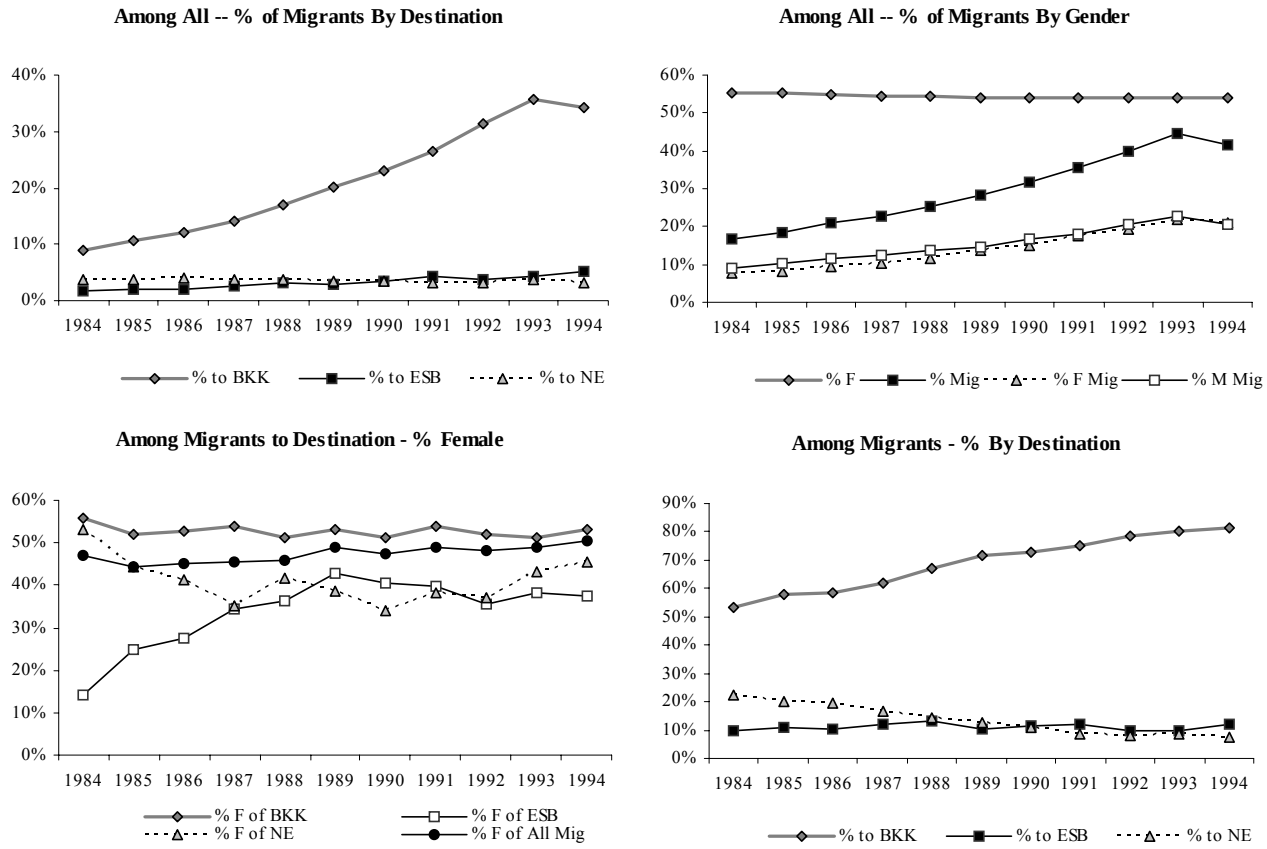

Figure 2 Migration Prevalence Trends in 1984-1994 period

Measures and Analytic Approach

Our analytic approach builds on a model developed in Massey and Zenteno (1999) to measure the dynamics of mass migration. We employ their approach for a number of reasons. Our data are limited in that we do not know the date of first migration and without making some very large assumptions cannot presume to estimate it. We do have a population of villagers 8-25 years old in 1984 and observe them forward in time, much like Massey and Zenteno (1999) do with their communities, taking into account sample attrition. We build on their model by adding a set of baseline attributes of individuals that might account for possible unobserved heterogeneity related to our explanatory factors and the dependent variable. We are interested in predicting whether a person is living outside of Nang Rong district or not in time t. Our model takes the following form and takes into account the correlated error structure of multiple observations from individuals (we estimate a random effects logistic equation):

(1) $\text{Prob}(\text{Mig}_{it}) = f(\text{Itrips}_{it-1}, \text{Iexp}_{it-1}, \text{Htrips}_{it-1}, \text{Hexp}_{it-1}, \text{Ctrips}_{it-1}, \text{Cexp}_{it-1}, \text{Variant}_{it}, \text{Invariant}_{i})$

where $\text{Prob}(\text{Mig}_{it})$ is a person$_i$'s probability of living outside of Nang Rong in year t, Mig_{it} is 1 if person$_i$ moved out of Nang Rong by year t and 0 otherwise, Itrips_{it-1} is the number of trips made by person$_i$ up through year t-1, Iexp_{it-1} is the number of months experienced as a migrant by person$_i$ up through year t-1[3], Htrips_{it-1} is the number of trips made by other people in person$_i$'s household up through year t-1, Hexp_{it-1} is the number of months experienced as a migrant by other people in personi's household up through year t-1, Ctrips_{it-1} is the number of trips made by other community members up through year t-1, and Cexp_{it-1} is the months of experience accumulated by other community members through year t-1.[4] The community migrant trips and months of migrant experience do not include the experience of the observed individual or the members of the observed individual's household.

We include as controls a vector of time-varying factors, including age, educational attainment, marital status, and the migration prevalence rate. Except for age, these are all included in the models as measured in time t-1. We also include as controls a vector of time invariant measures[5], including: sex and whether the person lived in a somewhat remote village or a very remote village in 1984. A village is considered somewhat remotely located if there are 1-2 obstacles to traveling to the district town. A village is considered very remotely located if there are three or more obstacles to traveling to the district town. The obstacles we include in our measure are the presence of a portion of the route to the district town that is a cart path (unpaved, rutted, and narrow), the lack of public transportation to the district town, travel to the district town

[3] Exact time in a place of destination was not measured by the survey. The survey did allow for multiple trips within one year (up to six trips – including return trips) and the survey links trips with work, education, and destination information. To measure months of migrant experience we took the number of trips taken within one year and divided it into 12 months. For one trip in one year we calculated the amount of experience as six months, for two trips we counted it as four months for each trip. Only 10 percent of the sample ever made more than round one trip in one year.

[4] This equation and data file are a replication of Massey and Zenteno's model and data (1999) except that we add measures of household migrant trips and experience and a vector of individual, household and community controls.

[5] All of these, except for the measure of sex, were data collected during the 1984 survey.

takes an hour or more (as reported by a village headman or key informant), that during the year there are four or months of difficult travel to leave the village (this is also a measure of road conditions and susceptibility to flooding), and it is 20 or more kilometers to the district town.

In this specification, the probability of living outside of Nang Rong depends not only on the age and sex of the individual, but also on a person's prior migratory experience (i.e., on his or her accumulated human capital) and on the degree to which he is surrounded by other villagers with migratory experience (the quantity of social capital). Our model is different from Massey and Zenteno's model in the following ways: first, we add a measure of household migrant trips and experience (because we suspect that the quality of information available to potential migrants is different at the household level than at the village level); second, we add a larger array of time varying and invariant factors that might be related to the migration decision; and third, we include a measure of village migration prevalence in 1984 as suggested by Massey, Goldring and Durand (1994). We do so because we are particularly interested in the effect of the quantity and quality of social capital, net of the exposure to migration experiences.

A table of means and proportions presented below provides a summary of all the variables in the model. Average person in the sample is 20.9 years old, while average migrant is slightly older (21.5 years old). Percentage of men in all sample is 46%, while among migrants it is higher with 52%. The gender percentage varies significantly across destinations. While only 48% of migrants to Bangkok (BKK) are men, the value is 64% for migrants to the Eastern Seaboard (ESB) and 59% for migrants to the northeast (NE). Of migrants to ESB, only 21% has some secondary education and 29% has completed secondary education. On the other hand, the percentages are higher among migrants to BKK or NE (23% and 36% respectively for BKK; 25% and 42% respectively for NE). 41% of migrants to NE are married, while only 29% of migrants to ESB and 36% of migrants to BKK are married. Average migrant to BKK has made 1.4 prior trips, while average migrant to ESB and NE have 1.5 and 1.1 prior trips, respectively. Looking at the values of household and village trips by destination, we see that average migrant to ESB lives in a household with 0.78 trips per person and in a village with 0.83 trips per person.

These values are slightly lower for a migrant to BKK (0.78 and 0.79 trips respectively), and lowest for a migrant to NE (0.54 and 0.64 trips respectively).

Table of Means and Proportions

	All Sample	All Migrants	Migrants to BKK	Migrants to ESB	Migrants to NE
Variable					
Age	20.914	21.464	21.742	21.066	20.882
Men	0.457	0.520	0.476	0.636	0.593
Some 2ndary School	0.214	0.235	0.227	0.215	0.247
Completed 2ndary School	0.305	0.355	0.360	0.294	0.412
Married	0.304	0.264	0.255	0.334	0.281
Remote Village	0.831	0.871	0.880	0.808	0.855
Migration Prevalence Rate	37.160	44.716	46.259	47.056	38.748
# Migration *Trips* Among Indiv.	0.617	1.352	1.399	1.465	1.111
# Migrant *Months* Among Indiv.	13.445	33.883	34.641	35.668	32.245
# Migrant *Trips* for HH Members Per HH	0.490	0.742	0.786	0.780	0.538
# Migrant *Months* for HH Members	10.920	17.653	18.582	17.337	15.544
# Migrant *Trips* for Vill. Members Per Person	0.620	0.763	0.794	0.834	0.638
# Migrant *Months* for Vill. Members	13.512	17.335	18.224	18.332	14.274

Our modeling approach introduces a set of baseline controls, the vectors of time varying and invariant factors, we then introduce the measures of accumulated migration experience. We evaluate this model for all migrants and then for each destination separately (results are found in Table 1). We then disaggregate the accumulated migration experience variables by destination and observe for each destination separately the effects of migration experience in a destination on the migration propensity to that destination (Table 2). Our next step involves further disaggregating migration experience by sex (Table 3). Then, in our final step, we evaluate these models separately for men and women (Tables 4 and 5). Below, we briefly discuss our baseline model and then move on to discuss the results evaluating the effect of migrant social capital on the probability of migrating in the Thai context.

Results

To summarize the findings, modeling migration to three destinations separately, we first see that migrant characteristics as well as the effect of prior migration experience change dramatically by destination. We see that female migrants tend to migrate to BKK, while male migrants migrate to ESB or NE. Interestingly, ESB receives the younger and less-educated migrants, while BKK receives more single migrants than married. Prior

migration experience increases migration probabilities to each destination but at significantly different rates. Disaggregating migration experience by destination, we find that experience in each destination increases the propensity of migration to that destination significantly. However, the magnitude of this increase is different in each destination. Prior individual trips have the greatest effect in NE, followed by ESB and BKK. On the other hand, prior household trips have the greatest effect on migration to ESB, followed by NE and BKK. Village experience has no significant effect on migration to NE or BKK, however it is the most important determinant of migration to ESB. Further disaggregating migration experience by gender, we obtain a more refined story. We find that in all three destinations, female trips have a stronger effect at the individual, household and village levels on future migration compared to male trips. Finally, modeling men's and women's migration separately, we find that the effect of migration experience also depends on migrant's sex. We observe that female trips have a stronger effect on female migration, and similarly male trips have a stronger effect on male migration. For women, in all three destinations, individual trips to destination are the most important determinant of migration. For men, men's and women's household and village trips to destination as well as individual trips become important in producing migration outcomes. In what follows, we explain the estimates in detail.

The first model takes migration to any destination as the dependent variable. The estimates presented in Table 1 show that the probability of migration increases at a decreasing rate with age, is greater for men compared to women, and also increases as individual's educational level increases. Marriage decreases the probability of migration significantly (by 64%), whereas living in a remote village increases the probability by 90%. Previous migration trips by the individual and the household both increase the tendency to migrate (by 56% and %12 respectively). Similarly, previous migrant months spent in destination by the individual and the household increase the probability of migrating, although at a much smaller rate (both by %1).[6] This story significantly changes once we redefine the dependent variable as migration to specific destinations. We run three separate models for each destination BKK, ESB and NE, and define in each model the dependent variable as migration to that destination only. When we compare the

[6] Note that migration duration is measured in months, not years, which deflates the size of the coefficient.

estimates of these models given in Table 1, we see considerable differences. First of all, while age increases the probability of migration to each destination, the rates of this increase are quite different (by 180% to BKK, by 46% to ESB and by 100% to NE). Similarly, while being a man increases the probability of migrating to ESB and NE by 213% and 439% respectively, it decreases the probability of migrating to BKK by 4%. This result actually confirms our intuition from the descriptives: BKK is a female destination, while ESB and NE are both male destinations. We also see clear differences in the effects of education. Having some secondary education rather than primary education increases the probability of migrating to BKK by 32% and to NE by 65%, but it decreases the probability of migrating to ESB by 43%. Again surprisingly, the effect of marital status also depends on destination. While it decreases the probability of migrating to BKK by 67%, it has no effect on migration to other destinations. Living in a remote village increases the probability of migrating to BKK by 59%, it decreases the probability of migrating to ESB by 58%, and has no effect on the probability of migrating to NE. Previous individual trips increase the probability of migration to all destinations but at different rates (by 60 % to BKK, by 31% to ESB and by 17% to NE).

The results presented in Table 1 clearly show that modeling migration decisions to different destinations separately can reveal important insights that are inaccessible in an aggregated model. Building on this insight, we next disaggregate our migration experience indicators at the individual-, household- and community-level by destination. Comparing the results presented in Table 2, we see that individual trips to BKK increase the probability of migrating to BKK by 84%. Similarly, previous individual trips to ESB increase the probability of migrating to ESB by 180%, and previous individual trips to NE increase the probability of migrating to NE by 192%. Household trips to BKK and ESB have a positive effect on the probability of migrating to that destination (increase by 21% to BKK and by 78% to ESB). Interestingly while previous community experience in a destination has no significant effect on migration to BKK or NE, it increases the migration probability enormously in the case of ESB.

We next disaggregate the migration experience by gender and destination. The results show striking differences in the effects of gendered migration experience on the probability of migration to any destination. Starting with individual trips to BKK, we see

that female trips increase the probability of migration to BKK by 128% and male trips only by 54%. Similarly, while female trips to ESB increase migration by 340%, male trips have no significant effect. For NE, the results are similar, female trips to NE increase the probability of migrating to NE by 181% while male trips increase it by 200%. In short, in all BKK and ESB female trips have a stronger effect on future migration compared to male trips, while the situation is reversed in the case of NE. Similarly, when we look at household trips, we find that male trips in the household only have a significant effect on migration to NE (an increase by 97%), whereas female trips in the household to BKK to ESB increase the probability of migration to those destinations by 35% and 229% respectively. Again, at the village level, female trips to BKK increase migration to BKK by 248%, while male trips have no effect. Female or male trips at the village level have no significant effect in either ESB or NE.

The results presented above clearly show that defining migration experience as both gender- and destination-specific is crucial to understand the migration patterns to different destinations. From our previous work, we also know that migration experience may operate differently for men and women in producing migration outcomes (Curran et al. *forthcoming*). Therefore, in the next analysis, we take into account this possibility and model migration of men and women to each destination separately. The results are given separately for men and women in Tables 4 and 5.

First, as we saw differences in migrant characteristics by destination in Table 1, here we see differences by destination and gender. While the odds of migrating increase with age for all destinations and for both men and women, the rates of this increase are significantly different. The probability of migrating to BKK increases by 145% for women and by 219% for men with a unit increase in age. This pattern (i.e. older age for men) can also be identified in the model estimates of ESB and NE. (Maybe this is explained by family expectations, older women are expected to get married and/or stay home and take care of children.) The probability of migrating to ESB and to NE increase by 19% and 55% for women and by 51% and %102% respectively for men with a unit increase in age. The effect of educational attainment on migration to specific destinations is also gender-specific. While having some secondary education rather than only primary education has no significant effect on women's migration, it increases men's migration to

BKK by 51%, to NE by 228% and decreases migration to ESB by 41%. Having completed secondary schooling rather than only primary education increases the odds of migrating to BKK by 79% for women and by 215% for men, to NE by 158% for women and by 150% for men, and has no effect on migration to ESB of both men and women. Living in a remote village does not effect migration to NE or ESB, but increases propensity to migrate to BKK by 98% for both men and women. The effect of gender-specific migration experience also depends on whether the migrant is a man or a woman. For female migrants to BKK, previous migrant trips increase the odds of migrating by 123%, while trips of women in the household increase the odds of migrating by 81%. Surprisingly, migrant trips by men in the household or community have no significant effect on women's migration. For male migrants to BKK, previous migrant trips increase the odds of migrating by 51%, migrant trips of men or women in the household or community has no significant effect upon migration, but migrant months of both men and women in the household increase the odds by 2%. Interestingly, male migrant trips to ESB by village members increases men's migration by an enormous amount (4E+12 times), while the effect of individual trips is only an increase by 211%. Contrarily, village migration experience of men or women has no significant effect on women's migration to BKK. Moving to migration patterns to ESB, we see that for female migration, the odds of migrating to ESB increases by 375% with each individual trip to ESB. Household experience of women also increases the odds by 439% for women. Migrant trips of women in the village increase the odds of migration by an enormous amount for women ($2*10^8$ times), while migrant months of women in the village to ESB decreases women's migration by 68%. Female migrant months to ESB in the household increases men's migration by 7%, a small effect compared to the increase of 211% provided by individual trips. Similar to women's migration, male migrant trips to ESB in the village increase men's migration infinitely ($4*10^{23}$ times), while male migrant months to ESB in the village decrease it by 59%. Finally observing model estimates of migration to NE, we see that women's migration propensity increases by 216% with each individual trip to NE. The odds of female migration to NE also increases by 5% with each female migrant trips to BKK in the household. For men, the odds of migrating increases by 180% with each individual trip, by 257% with each male trip to NE in the household.

Conclusion

In this paper, we examine the differential effect of migrant networks on migration propensities of men and women across destinations in order to extend our theoretical understanding of the role of cumulative causation for influencing migration patterns. Using a unique longitudinal data set from Thailand, we observe migration to three different destinations: a regional, primarily agricultural wage laborer market (North Eastern Provinces - NE); a primate city and its surrounding suburbs (Bangkok - BKK); and a newly industrialized, state sponsored export processing zone/city (Eastern Seaboard - ESB). Because each destination is defined by different labor market characteristics related to gender and places of origin are also marked by different gender relations, we propose and find that there are significantly different patterns of migration when disaggregating the accumulated migrant experience by sex, destination, and place of origin (household or village).

In the first destination, the primarily agricultural wage labor market in the Northeastern region of the country, we expect that migrant networks will have limited effects (due to the proximity of the destination). Further, since agricultural wage labor is primarily a male-based occupation involving the planting or harvesting of upland field crops, we suspect that migrant networks will be centered upon male-based networks and influence male migrant outcomes, rather than be centered upon female-based networks and influence female migration.

In the second destination, Bangkok and the surrounding communities defining the Bangkok Metropolitan Area, we suspect a fairly sex-segregated labor market, but not because of selectivity of the migrant stream. Instead, we suspect that men and women both migrate to Bangkok but end up in labor markets that are generally sex segregated – either light weight manufacturing and service sector jobs (for women) or heavier manufacturing, construction, or transportation sector jobs (for men). We predict that the cumulative effect of these experiences will positively influence women's and men's migration, respectively, but not vice versa. Further, we suspect that migration experiences at the household level will be more important than at the village level for influencing migrant outcomes.

In the third destination, a new export processing zone – developed in the mid- to late 1980's, the migrant cumulative experience may be particularly influential when the ties are defined by strength of relationship – either based in the household or demonstratively through frequent return trips, rather than extended stays in the destination. The relative scarcity of information about the destination will mean frequent return trips by migrants will serve as the main way of conveying information. Further, we suspect that household networks will contain significantly fewer resources than village networks and therefore be less useful than village networks. Again, given the sex-segregated experiences, female village networks will influence women's migration and not men's and male village networks will influence men's migration to the Eastern Seaboard and not women's.

Our empirical analyses support majority of these predictions. We observe that ESB receives the younger and less-educated migrants, while BKK receives more single migrants than married. Prior migration experience increases migration probabilities to each destination but at significantly different rates. Disaggregating migration experience by destination, we find that experience in each destination increases the propensity of migration to that destination significantly. However, the magnitude of this increase is different in each destination. As we have predicted, prior individual trips have the greatest effect in NE, followed by ESB and BKK. On the other hand, prior household trips have the greatest effect on migration to ESB, followed by NE and BKK. Village experience has no significant effect on migration to NE or BKK, however it is the most important determinant of migration to ESB. Further disaggregating migration experience by gender, we obtain a more refined story. We find that in all three destinations, female trips have a stronger effect at the individual, household and village levels on future migration compared to male trips. Finally, modeling men's and women's migration separately, we find that the effect of migration experience also depends on migrant's sex. We observe that female trips have a stronger effect on female migration, and similarly male trips have a stronger effect on male migration. For women, in all three destinations, individual trips to destination are the most important determinant of migration. For men, men's and women's household and village trips to destination as well as individual trips become important in producing migration outcomes.

Table 1: Logistic Estimation of the Odds of Being a Migrant in Destination (Living Outside of Nang Rong)

	Model 1 - Any Dest			Model 2 - BKK			Model 3 - ESB			Model 4 - NE		
	OR	**z**		**OR**	**z**		**OR**	**z**		**OR**	**z**	
Age	2.83	24.04	***	2.80	21.09	***	1.46	3.79	***	2.00	6.91	***
Age*Age	0.98	-24.24	***	0.98	-20.42	***	0.99	-4.31	***	0.99	-6.55	***
Men	1.72	5.85	***	0.96	-0.39		3.13	6.64	***	5.39	7.65	***
Some 2ndary School	1.40	3.43	**	1.32	2.19	‡	0.57	-2.28	‡	1.65	2.62	‡
Completed 2ndary School	2.41	10.32	***	2.32	9.21	***	1.20	1.00		2.20	4.28	***
Married	0.36	-13.80	***	0.33	-13.47	***	0.87	-0.87		0.76	-1.65	
Remote Village	1.90	4.86	***	1.59	3.12	**	0.42	-4.40	***	1.05	0.25	
Migration Prevalence Rate	1.03	6.57	***	1.04	6.94	***	1.04	3.16	**	1.01	1.07	
# Migration *Trips* Among Indiv.	1.56	13.23	***	1.60	12.39	***	1.31	4.12	***	1.17	2.26	‡
# Migrant *Months* Among Indiv.	1.01	2.69	*	1.00	1.69		1.00	-0.69		0.99	-2.97	**
# Migrant *Trips* for HH Members Per HH	1.12	2.38	‡	1.08	1.38		1.07	0.74		0.95	-0.49	
# Migrant *Months* for HH Members	1.01	3.79	***	1.01	3.40	**	1.00	-0.03		1.00	0.23	
# Migrant *Trips* for Vill. Members Per Person	0.82	-0.61		0.64	-1.23		2.52	1.45		0.39	-1.25	
# Migrant *Months* for Vill. Members	0.99	-1.65		0.99	-0.58		0.95	-2.57	‡	1.01	0.28	
s.e. (u)	2.25			2.41			3.51			3.54		
Rho	0.61			0.64			0.79			0.79		
Wald Chi-square	2867.55		***	2599.48		***	298.40		***	182.97		***

‡p<.05, *p<.01, **p<.005, ***p<.001

Table 2: Logistic Estimation of the Odds of Being a Migrant in Destination (Living Outside of Nang Rong) - Disaggregating Migration Experience by Destination

	Model 1 - BKK			Model 2 - ESB			Model 3 - NE		
	OR	**z**		**OR**	**z**		**OR**	**z**	
Age	2.73	21.00	***	1.38	3.31	**	1.73	5.54	***
Age*Age	0.98	-20.68	***	0.99	-3.94	***	0.99	-5.61	***
Men	1.01	0.12		2.19	4.77	***	2.13	3.37	**
Some 2ndary School	1.37	2.62	*	0.71	-1.82		1.82	2.17	‡
Completed 2ndary School	2.52	10.47	***	1.44	2.13	‡	2.34	3.18	**
Married	0.34	-13.23	***	0.88	-0.77		0.65	-2.47	‡
Remote Village	1.81	4.48	***	0.64	-2.04	‡	0.96	-0.19	
Migration Prevalence Rate	1.02	4.53	***	1.01	2.47	‡	0.98	-3.22	**
# Migration *Trips to BKK* Among Indiv.	1.84	14.92	***						
# Migrant *Months to BKK* Among Indiv.	1.01	2.80	*						
# Migrant *Trips to BKK* for HH Members Per HH	1.21	3.06	*						
# Migrant *Months to BKK* for HH Members	1.01	3.75	***						
# Migrant *Trips to BKK* for Vill. Members Per Person	1.93	1.46							
# Migrant *Months to BKK* for Vill. Members	0.99	-0.89							
# Migration *Trips to ESB* Among Indiv.				2.80	8.49	***			
# Migrant *Months to ESB* Among Indiv.				1.00	0.78				
# Migrant *Trips to ESB* for HH Members Per HH				1.78	2.36	‡			
# Migrant *Months to ESB* for HH Members				1.02	2.39	‡			
# Migrant *Trips to ESB* for Vill. Members Per Person				2.E+06	6.54	***			
# Migrant *Months to ESB* for Vill. Members				0.58	-6.95	***			
# Migration *Trips to NE* Among Indiv.							2.92	9.80	***
# Migrant *Months to NE* Among Indiv.							1.00	-0.77	
# Migrant *Trips to NE* for HH Members Per HH							1.49	1.89	
# Migrant *Months to NE* for HH Members							1.02	2.75	*
# Migrant *Trips to NE* for Vill. Members Per Person							0.47	-0.41	
# Migrant *Months to NE* for Vill. Members							1.02	0.44	
s.e. (u)	2.20			2.69			2.71		
Rho	0.60			0.69			0.69		
Wald Chi-square	2765.16		***	416.61		***	260.11		***

Table 3: Logistic Estimation of the Odds of Being a Migrant in Destination (Living Outside of Nang Rong) - Disaggregating Migration Experience by Destination and Gender

	Model 1 - BKK			Model 2 - ESB			Model 3 - NE		
	OR	z		OR	z		OR	z	
Age	2.73	20.92	***	1.38	3.35	**	1.76	5.98	***
Age*Age	0.98	-20.46	***	0.99	-3.92	***	0.99	-6.21	***
Men	1.15	1.38		2.68	5.56	***	2.32	4.24	***
Some 2ndary School	1.31	2.24	‡	0.68	-1.73		1.86	3.03	**
Completed 2ndary School	2.50	10.41	***	1.40	1.93		2.43	4.67	***
Married	0.34	-13.15	***	0.84	-1.06		0.68	-2.31	‡
Remote Village	1.74	4.16	***	1.08	0.31		0.93	-0.36	
Migration Prevalence Rate	1.02	4.32	***	1.00	0.83		0.98	-2.95	**
# Female Migration *Trips to BKK* Among Indiv.	2.28	12.79	***						
# Female Migrant *Months to BKK* Among Indiv.	1.00	0.89							
# Female Migrant *Trips to BKK* for HH Members Per HH	1.35	3.15	**						
# Female Migrant *Months to BKK* for HH Members	1.01	3.05	**						
# Female Migrant *Trips to BKK* for Vill. Members Per Person	3.48	2.00	‡						
# Female Migrant *Months to BKK* for Vill. Members	1.02	0.89							
# Male Migration *Trips to BKK* Among Indiv.	1.54	7.20	***						
# Male Migrant *Months to BKK* Among Indiv.	1.01	3.61	***						
# Male Migrant *Trips to BKK* for HH Members Per HH	1.06	0.70							
# Male Migrant *Months to BKK* for HH Members	1.01	2.85	**						
# Male Migrant *Trips to BKK* for Vill. Members Per Person	1.35	0.42							
# Male Migrant *Months to BKK* for Vill. Members	0.94	-1.85							
# Female Migration *Trips to ESB* Among Indiv.				4.40	4.76	***			
# Female Migrant *Months to ESB* Among Indiv.				1.03	2.62	*			
# Female Migrant *Trips to ESB* for HH Members Per HH				3.29	2.91	**			
# Female Migrant *Months to ESB* for HH Members				1.04	2.37	‡			
# Female Migrant *Trips to ESB* for Vill. Members Per Person				2.04	0.15				
# Female Migrant *Months to ESB* for Vill. Members				0.84	-1.11				
# Male Migration *Trips to ESB* Among Indiv.				2.93	6.19	***			
# Male Migrant *Months to ESB* Among Indiv.				1.00	0.35				
# Male Migrant *Trips to ESB* for HH Members Per HH				1.63	1.57				
# Male Migrant *Months to ESB* for HH Members				0.98	-1.31				
# Male Migrant *Trips to ESB* for Vill. Members Per Person				2.E+09	7.81	***			
# Male Migrant *Months to ESB* for Vill. Members				0.51	-6.61	***			
# Female Migration *Trips to NE* Among Indiv.							2.81	6.04	***
# Female Migrant *Months to NE* Among Indiv.							1.01	1.16	
# Female Migrant *Trips to NE* for HH Members Per HH							0.87	-0.46	
# Female Migrant *Months to NE* for HH Members							1.04	3.90	***
# Female Migrant *Trips to NE* for Vill. Members Per Person							0.07	-0.91	
# Female Migrant *Months to NE* for Vill. Members							0.96	-0.54	
# Male Migration *Trips to NE* Among Indiv.							3.00	8.41	***
# Male Migrant *Months to NE* Among Indiv.							0.99	-2.07	‡
# Male Migrant *Trips to NE* for HH Members Per HH							1.97	2.69	*
# Male Migrant *Months to NE* for HH Members							1.00	-0.01	
# Male Migrant *Trips to NE* for Vill. Members Per Person							1.54	0.14	
# Male Migrant *Months to NE* for Vill. Members							1.07	0.54	
s.e. (u)	2.19			2.31			2.74		
Rho	0.59			0.62			0.70		
Wald Chi-square	2747.71		***	391.53		***	278.89		***

‡p<.05, *p<.01, **p<.005, ***p<.001

Table 4: Logistic Estimation of the Odds of Being a Migrant in Destination (Living Outside of Nang Rong) for FEMALES - Disaggregating Migration Experience by Destination and Gender

	Model 1 - BKK			Model 2 - ESB			Model 3 - NE		
	OR	z		OR	z		OR	z	
Age	2.45	13.10	***	1.19	1.03		1.55	2.97	**
Age*Age	0.98	-13.26	***	0.99	-1.60		0.99	-3.14	**
Some 2ndary School	1.24	1.24		1.12	0.31		1.04	0.14	
Completed 2ndary School	1.79	4.41	***	1.09	0.30		2.58	3.58	***
Married	0.19	-15.03	***	0.80	-0.89		0.76	-1.15	
Remote Village	1.98	3.46	**	0.73	-0.81		1.51	1.35	
Migration Prevalence Rate	1.02	3.70	***	1.01	1.70		0.97	-3.34	**
# Female Migration *Trips to BKK* Among Indiv.	2.23	12.20	***						
# Female Migrant *Months to BKK* Among Indiv.	1.00	0.89							
# Female Migrant *Trips to BKK* for HH Members Per HH	1.81	4.16	***						
# Female Migrant *Months to BKK* for HH Members	1.00	-0.12							
# Female Migrant *Trips to BKK* for Vill. Members Per Person	7.49	2.30	‡						
# Female Migrant *Months to BKK* for Vill. Members	0.97	-0.85							
# Male Migrant *Trips to BKK* for HH Members Per HH	1.04	0.29							
# Male Migrant *Months to BKK* for HH Members	1.01	1.20							
# Male Migrant *Trips to BKK* for Vill. Members Per Person	1.78	0.54							
# Male Migrant *Months to BKK* for Vill. Members	0.99	-0.22							
# Female Migration *Trips to ESB* Among Indiv.				4.75	6.56	***			
# Female Migrant *Months to ESB* Among Indiv.				1.03	2.70	*			
# Female Migrant *Trips to ESB* for HH Members Per HH				5.39	3.42	**			
# Female Migrant *Months to ESB* for HH Members				1.01	0.66				
# Female Migrant *Trips to ESB* for Vill. Members Per Person				2.E+08	2.47	‡			
# Female Migrant *Months to ESB* for Vill. Members				0.32	-3.81	***			
# Male Migrant *Trips to ESB* for HH Members Per HH				2.15	1.17				
# Male Migrant *Months to ESB* for HH Members				0.99	-0.56				
# Male Migrant *Trips to ESB* for Vill. Members Per Person				981.37	1.38				
# Male Migrant *Months to ESB* for Vill. Members				0.84	-0.95				
# Female Migration *Trips to NE* Among Indiv.							3.16	6.37	***
# Female Migrant *Months to NE* Among Indiv.							1.01	0.79	
# Female Migrant *Trips to NE* for HH Members Per HH							0.77	-0.59	
# Female Migrant *Months to NE* for HH Members							1.05	3.25	**
# Female Migrant *Trips to NE* for Vill. Members Per Person							0.03	-0.69	
# Female Migrant *Months to NE* for Vill. Members							0.97	-0.21	
# Male Migrant *Trips to NE* for HH Members Per HH							1.38	0.70	
# Male Migrant *Months to NE* for HH Members							1.01	0.45	
# Male Migrant *Trips to NE* for Vill. Members Per Person							471.17	1.11	
# Male Migrant *Months to NE* for Vill. Members							0.99	-0.04	
s.e. (u)	2.30			2.20			2.96		
Rho	0.62			0.59			0.73		
Wald Chi-square	1521.08		***	215.37		***	147.18		***

‡p<.05, *p<.01, **p<.005, ***p<.001

Table 5: Logistic Estimation of the Odds of Being a Migrant in Destination (Living Outside of Nang Rong) for MALES - Disaggregating Migration Experience by Destination and Gender

	Model 1 - BKK			Model 2 - ESB			Model 3 - NE		
	OR	z		OR	z		OR	z	
Age	3.19	17.05	***	1.51	3.39	**	2.02	5.31	***
Age*Age	0.98	-16.47	***	0.99	-3.71	***	0.98	-5.52	***
Some 2ndary School	1.51	2.48	‡	0.59	-2.07	‡	3.28	3.66	***
Completed 2ndary School	3.15	9.20	***	1.51	1.83		2.50	3.75	***
Married	0.72	-2.65	*	0.90	-0.44		0.65	-1.93	
Remote Village	1.61	2.44	‡	1.40	1.11		0.65	-1.66	
Migration Prevalence Rate	1.02	2.47	‡	1.00	-0.20		0.99	-1.33	
# Female Migrant *Trips to BKK* for HH Members Per HH	1.09	0.72							
# Female Migrant *Months to BKK* for HH Members	1.02	4.29	***						
# Female Migrant *Trips to BKK* for Vill. Members Per Person	2.43	1.02							
# Female Migrant *Months to BKK* for Vill. Members	1.04	1.33							
# Male Migration *Trips to BKK* Among Indiv.	1.51	7.33	***						
# Male Migrant *Months to BKK* Among Indiv.	1.01	2.45	‡						
# Male Migrant *Trips to BKK* for HH Members Per HH	1.11	0.70							
# Male Migrant *Months to BKK* for HH Members	1.01	2.07	‡						
# Male Migrant *Trips to BKK* for Vill. Members Per Person	1.29	0.26							
# Male Migrant *Months to BKK* for Vill. Members	0.92	-1.76							
# Female Migrant *Trips to ESB* for HH Members Per HH				1.79	0.87				
# Female Migrant *Months to ESB* for HH Members				1.07	2.83	*			
# Female Migrant *Trips to ESB* for Vill. Members Per Person				0.00	-1.73				
# Female Migrant *Months to ESB* for Vill. Members				1.42	1.70				
# Male Migration *Trips to ESB* Among Indiv.				3.11	7.45	***			
# Male Migrant *Months to ESB* Among Indiv.				1.00	0.10				
# Male Migrant *Trips to ESB* for HH Members Per HH				1.38	0.97				
# Male Migrant *Months to ESB* for HH Members				0.98	-1.71				
# Male Migrant *Trips to ESB* for Vill. Members Per Person				4.E+12	8.70	***			
# Male Migrant *Months to ESB* for Vill. Members				0.41	-7.11	***			
# Female Migrant *Trips to NE* for HH Members Per HH							0.71	-0.84	
# Female Migrant *Months to NE* for HH Members							1.06	2.71	*
# Female Migrant *Trips to NE* for Vill. Members Per Person							0.11	-0.67	
# Female Migrant *Months to NE* for Vill. Members							0.96	-0.40	
# Male Migration *Trips to NE* Among Indiv.							2.80	8.93	***
# Male Migrant *Months to NE* Among Indiv.							0.99	-1.07	
# Male Migrant *Trips to NE* for HH Members Per HH							3.57	2.61	*
# Male Migrant *Months to NE* for HH Members							0.99	-0.98	
# Male Migrant *Trips to NE* for Vill. Members Per Person							1.92	0.18	
# Male Migrant *Months to NE* for Vill. Members							1.00	-0.02	
s.e. (u)	2.17			2.26			2.70		
Rho	0.59			0.61			0.69		
Wald Chi-square	1239.55		***	283.46		***	171.71		***

‡p<.05, *p<.01, **p<.005, ***p<.001

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Figure 1: Map of Setting and Study Site